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See What
at I . . . Controlling V
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ee What I . . .
Controlling Vision Through

See What I...

Controlling Vision through the Senses

Alex Taylor Wilk

Thesis Preparation Fall 2009

Syracuse University: Bachelors of Architecture

Committee Members: Lori Brown & Robert Svetz

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THESIS PROJECT

"In memorable experiences of architecture space, matter and time fuse into a single dimension, into the basic substance of being, that penetrates consciousness. We identify ourselves with this space, this place, this moment, and these dimensions become ingredients of our very existence. Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses. "

-Juhani Pallasmaa¹

1

The realism of architectural experience is rooted in the occupation of space within a building and the hidden dimension of the senses. Placing the sense of sight at the top of the hierarchical scale in comparison to the other senses has become a theme in Western architectural approach. The ocular is so potent in contemporary society specifically architecture, promoted by technology, which has ultimately been influenced through the visual imagery of television and the media. This technologically oriented imagery has led us to become dismissive of the other senses.

By dismissing the other (non visual) senses we are encouraging a design approach that lacks concern for human, physical and emo-

tional engagement. We as a society have become numb to emotive involvement - we have become mesmerized by imagery and have forgotten about the capabilities architecture can employ on experience.

Architects like Steven Holl, Peter Zumthor and Glen Murcutt have designed spaces incorporating the non-dismissive senses in order to produce multi-phenomena's ultimately enhancing the occupant's experience. Recently in architecture there has been a rising interest in the invisible, and architects like Descosterd & Rahm express the "unseen" through an avant-garde minimalist style.

Decosterd & Rahm's architecture distorts ar-



FILM: PLAYTIME

JACQUES TATI

PARIS, FRANCE

1967

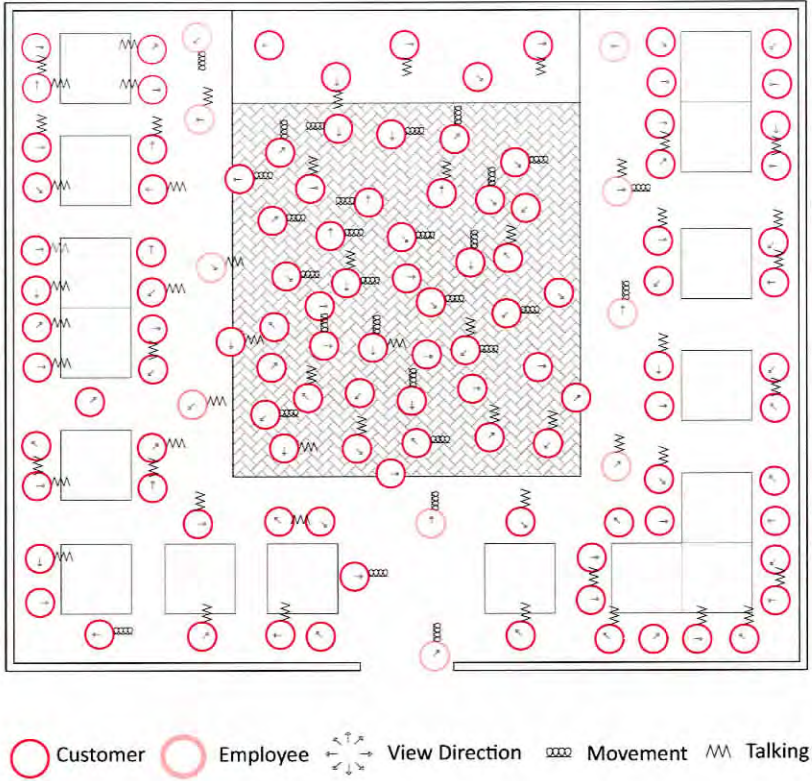




DIAGRAM: FILM PLAYTIME

LEFT: PLAN

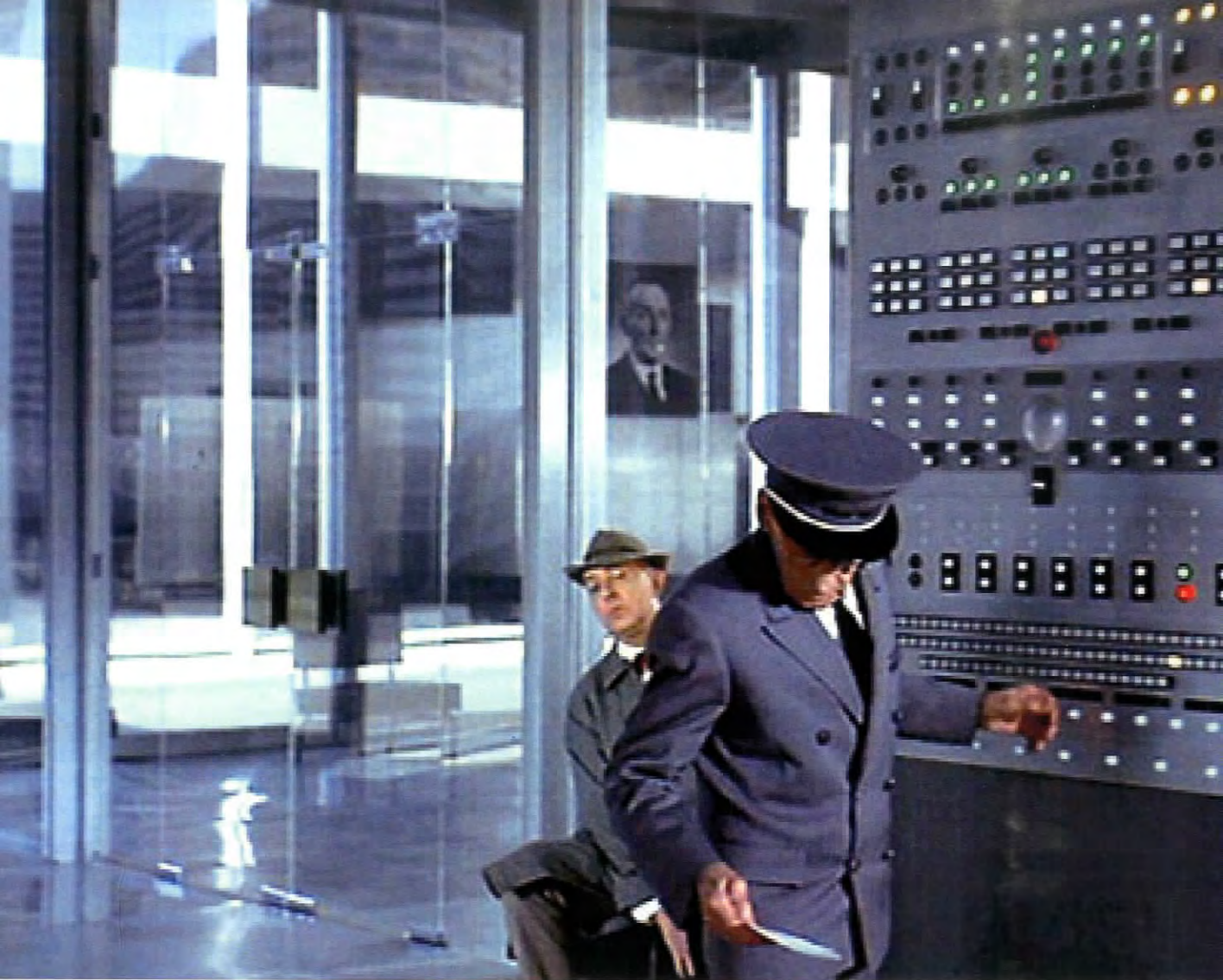
RIGHT: SECTION

RESTURANT SCENE

All too often our bodies remains remote and disengaged within in a building/ constructed space. For some time now in architecture, aesthetics have taken precedence, giving far more importance to form, idea and appearance than to the occupant's needs and embodied experiences. Contemporary works in architecture have been perceived as autonomous objects which are clearly represented in books, magazines and visually oriented mediums. Through these visually concentrated mediums you can't smell the building, you can sense the volume of space, and you can't feel the air move nor the warmth of the sunshine. Architects are creating the building as

an object, where we can look but cannot engage with its potential experience.

Society values sight as the utmost important aspect of comprehension and understanding in comparison to the other senses - induced by technology oriented imagery this has become consistent in western and international architectural application. We are living in a society where technology has evoked a dominant ocular presence with attractive aesthetics and performances yet in due course detaching itself from its environment. David Michael Levin critiques the dominance of the eye when he states: "I think it is appropriate to challenge the hegemony of vision - the



FILM: PLAYTIME

JACQUES TATI

PARIS, FRANCE

1967

ocularcentrism of our culture. And I think we need to examine very critically the character of vision that predominates today in our world. We urgently need a diagnosis of the psychosocial pathology of everyday seeing and a critical understanding of ourselves, as visionary beings.”⁵

Modernists have designed structures to please the eye yet they have left the rest of the senses, body, and recollection behind. The only sense that can keep up with the pace of the technology is vision. Le Corbusier states: “I exist in life only on the condition that I see; I am and I remain (and impenitent) visual-everything is in the visual”.⁶ The eyes

become an organic prototype for modernist architects. A lot of architects today are more interested in creating visual effects rather than exploring the buildings tactile, acoustic, scent and taste capabilities.

² David Harvey, *The Condition of Postmodernity* (Cambridge), 1992, pg. 183

³ Colomina, Beatriz, “Enfolded by Images: The Esmeev” *Audio-media Architecture*, *Gray Room* 12 (2003): pg.7

⁴ Colomina, Beatriz, *Privacy and publicity: modern architecture as mass media*, Cambridge, Mass.: MIT, 1994, pg.27 Colomina explores simultaneous imagery

⁵ David Michael Levin, “Seeing and Fall: Quasiomniscience: Heidegger’s Reading of the History of Metaphysics” *Indiana* 1991, pg. 105

⁶ Zumthor Peter, *Thinking Architecture*, Trans. Alexander Scharif, Turner and Catherine Schreyer, Boston, 2006, pg. 11 Zumthor uses his design to explain phenomena that are



UN CHIEN ANDALOU (ANDALUSIAN DOG)

LUIS BUNUEL AND SALVADOR DALI

FRANCE

1929

"The world is full of signs and information, which stand for things that no one fully understands because they, too, turn out to be more signs for other things. The real thing remains hidden. No one gets to see it."

-Peter Zumthor⁷

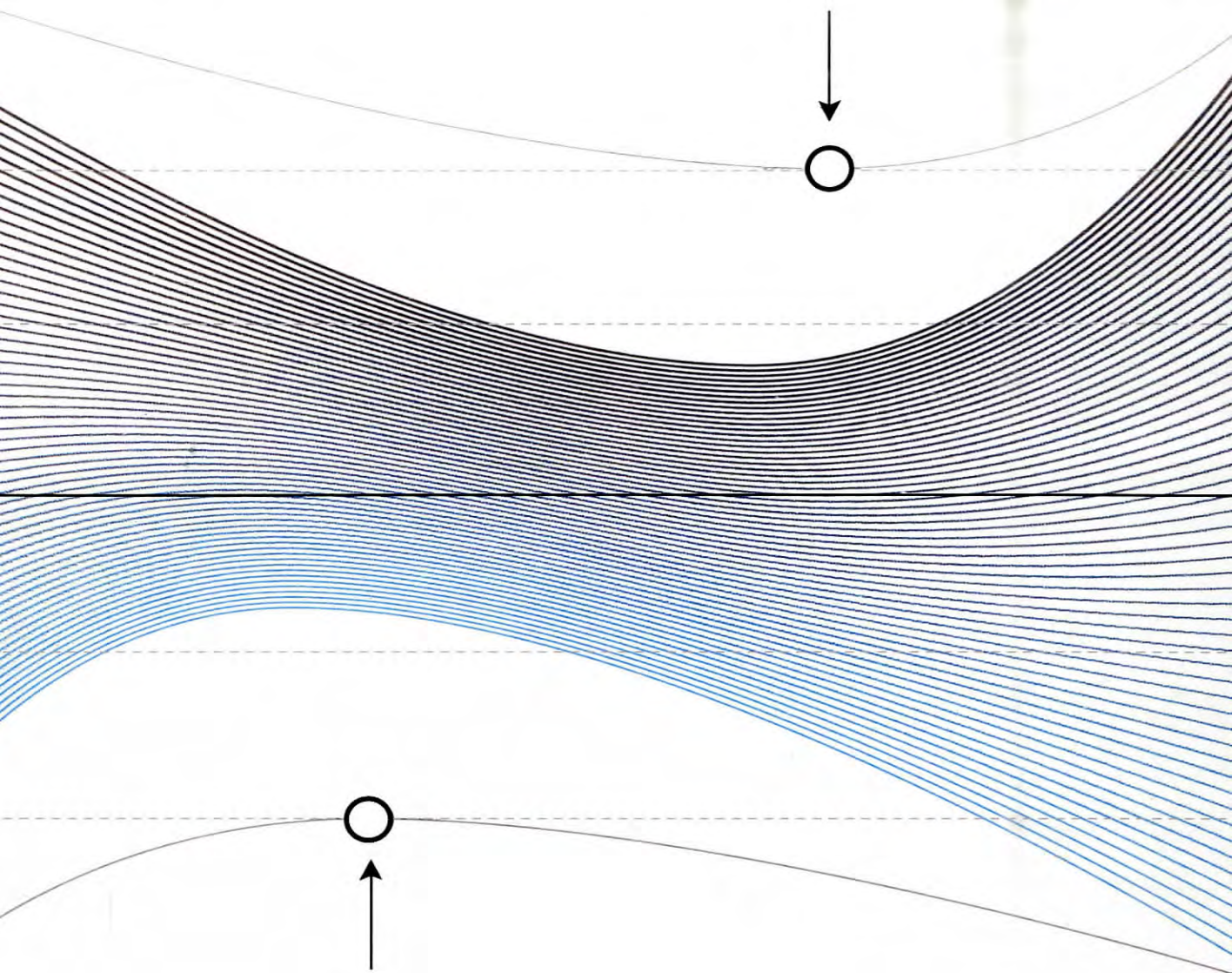
3

Induced by hyper imagery and technology, society has been devoted to the visible. We are in a period where the slippage of the real/visible towards the invisible is taking place, a shift of architecture towards the atmospheric and the biological as well as the meteorological. The considerable progress in life sciences resonates with today's study of the climate and concerns of global warming. The fields of the visible are overly saturated with symbols, images and stories that only deal with an aesthetic condition.

"The tools of architecture must become invisible and light, producing places like free, open landscapes, a new geography, different

kinds of meteorology; renewing the idea of form and use between sensation and phenomenon, between the neurological and meteorologically, between the physiological and the atmospheric. These become spaces with no meaning, no narrative; interpretable spaces in which margins disappear, structures dissolve and limits vanish."⁸ Architecture must build unlimited sensual exchanges between the body and space, the senses, skin, climate temperature and variations in humidity.

Architects of these spaces, specifically Decosterd & Rahm, aim to re-establish the language of architecture with the knowledge of the invisible and stretch between the physiologi-



LATITUDINAL DISTORTION

DECOSTERD & RAHM

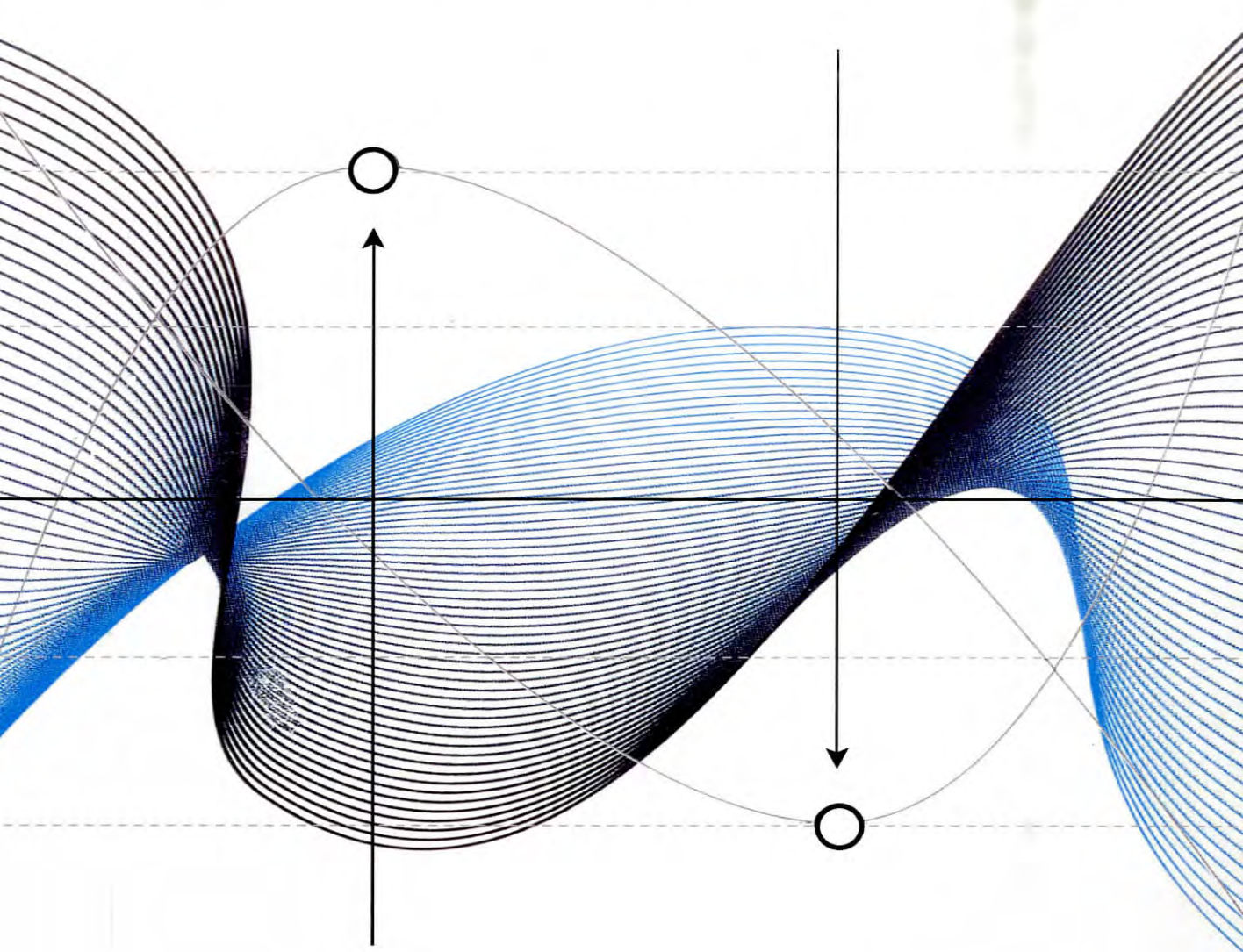
BOOK: DISTORTIONS

2000-2005

ogy and meteorology. In Descosterd & Rahm's manifesto *Form and Function Follow Climate*, the conditions of temperature, humidity and light are deployed as new instruments for determining architectural space keyed to: human comfort and behavior, energy efficiency and a single sensory experience. The intention is to alter the essence of the elements of architecture in order to disintegrate the visible. The architectural tools in Descosterd & Rahm's works are invisible. It is something we perceive, feel, hear, smell and taste.

Descosterd & Rahm have deployed a formula to their projects and exhibitions - their belief in climatic distortion remains constant where

one invisible sense is being explored.



LATITUDINAL DISTORTION II

DECOSTERD & RAHM

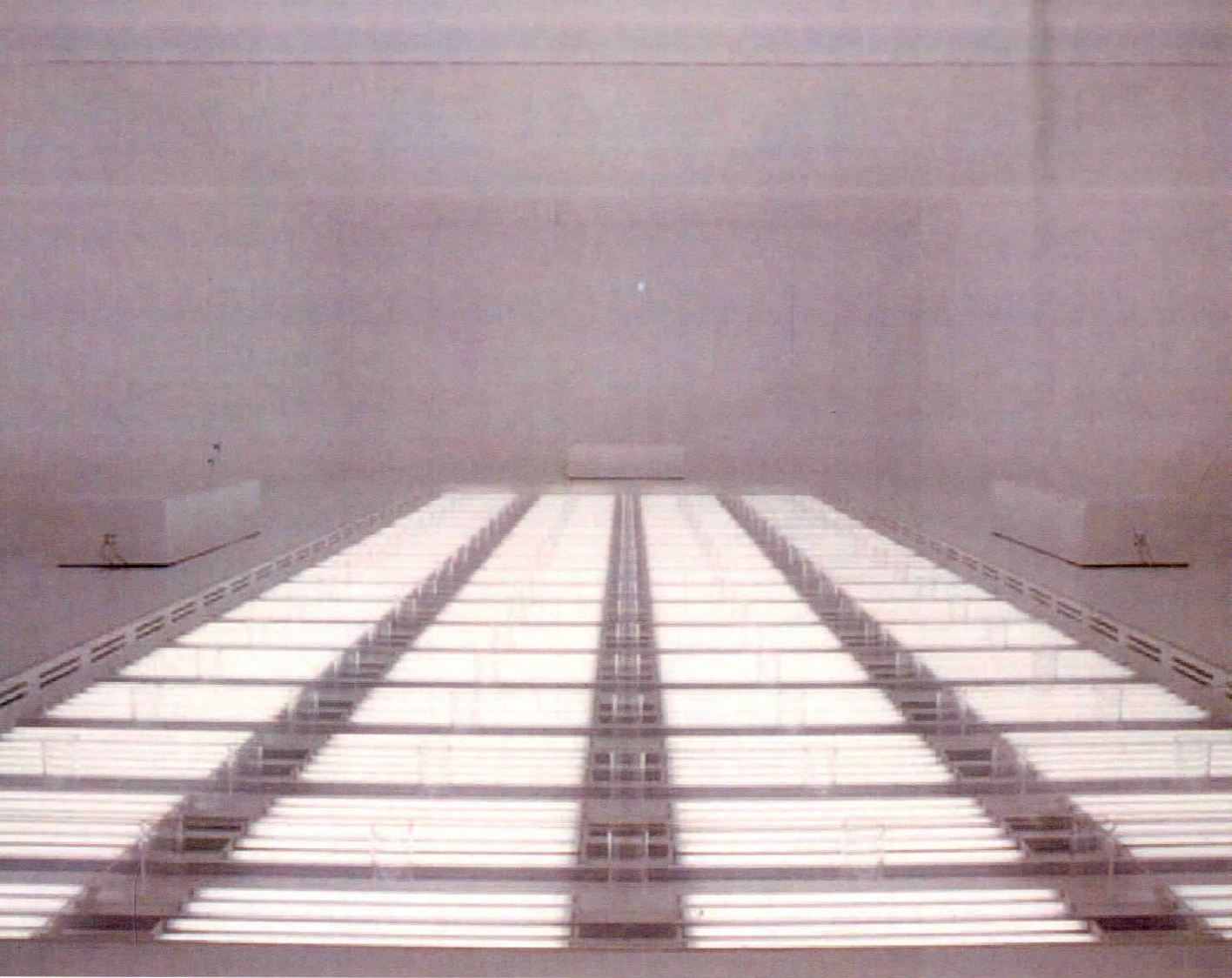
BOOK: DISTORTIONS

2000-2005

Decosterd & Rahm designed the "Hormonarium," an installation for the Swiss Pavilion in 2002 at the Architectural Biennale. The project explored the relationship between architecture and the human metabolism, between space, light and the neurological systems of the body via 528 florescent tubes set under the floor simultaneously reducing the oxygen levels from 21 to 14.5 percent. This mimicked a high altitude climatic condition like the mountains of the Swiss Alps. A high intensity light produced an increase in the nitrogen level and marked a decrease of breathing air in this luminous and mesmerizingly sonorous space. Some visitors began to feel sexual exhilaration, while some

felt slightly disorientated and confused. Ultimately this "alpine-like climate" was meant to allow visitors to experience - a decrease in fatigue, an increase in sexual desire and a regulation in moods. As the visitors began to feel "dopey" due to the physic-chemical parameter of the room, the occupants exhibited bizarre behavior, but also slight euphoria due to endorphin production.

Decosterd & Rahm deal with the environment as if it were a living thing undergoing constant change. Rahm imposes a continuous monitoring system which implies the intent to exercise a considerable degree of what takes place in the spaces he de-



HORMONORIUM

DECOSTERD & RAHM

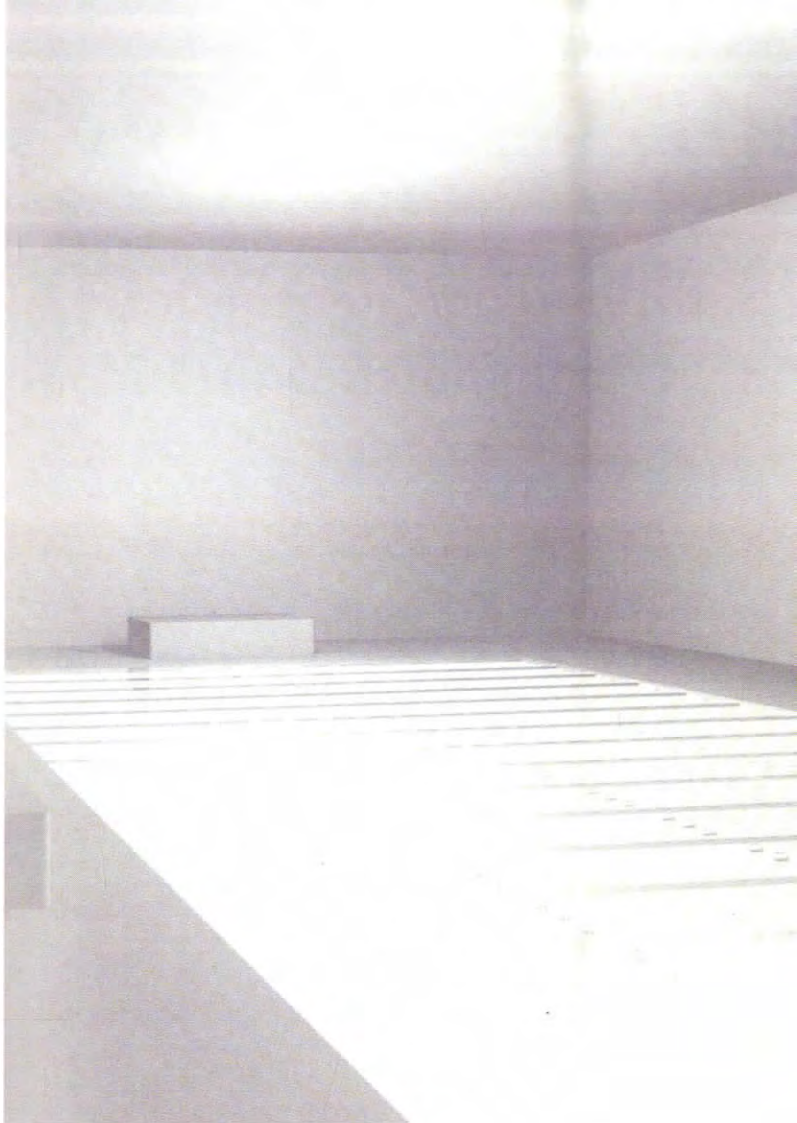
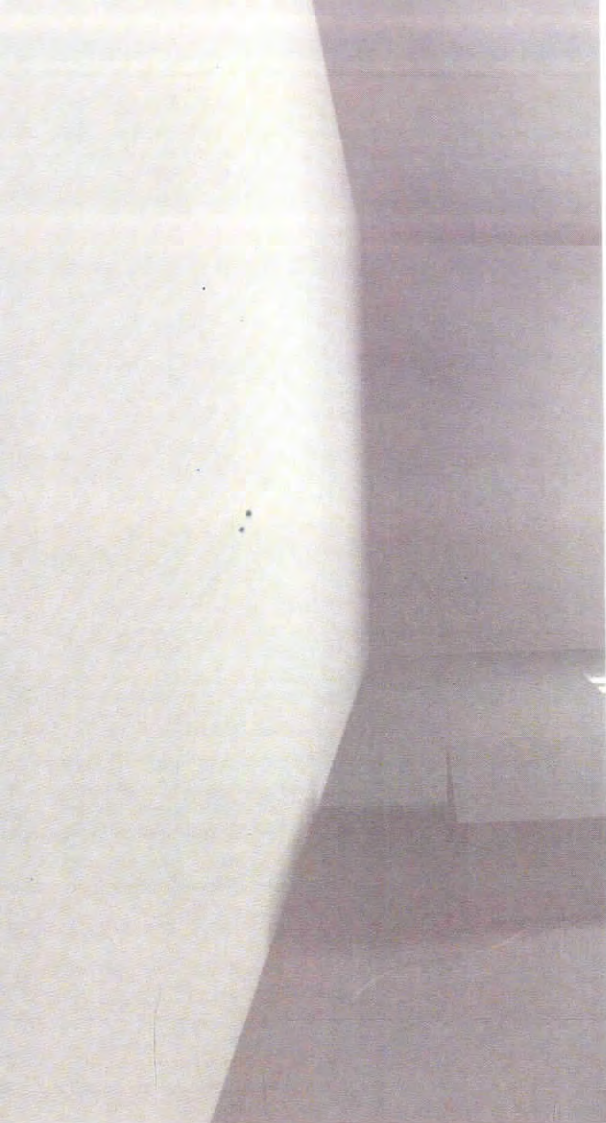
SWISS ARCHITECTURAL BIENALLE

2002

signs. He concentrates his attention on the problem of atmospheric conditions inside the building through detailed analysis and manipulations of larger environmental issues. Due to the manipulation of atmospheric levels, after ten minutes of being in the “Hormonorium” installation physiologists can scientifically conclude that the effects of being in this space will improve the body’s physical capabilities up to 10 percent.

Reyner Banham wrote that “in freeing architecture from local climatic constraints, mechanical environmental management’s techniques have given carte blanche for formal experimentation”.⁹ Rahm exploits this new

field of activity which is tied to an original aesthetic value registered in the physiological dimension of a buildings performance. The new invisible elements measure the environment by means of technology establishing a climate which will define new behaviors and determine the production of space to contain them.

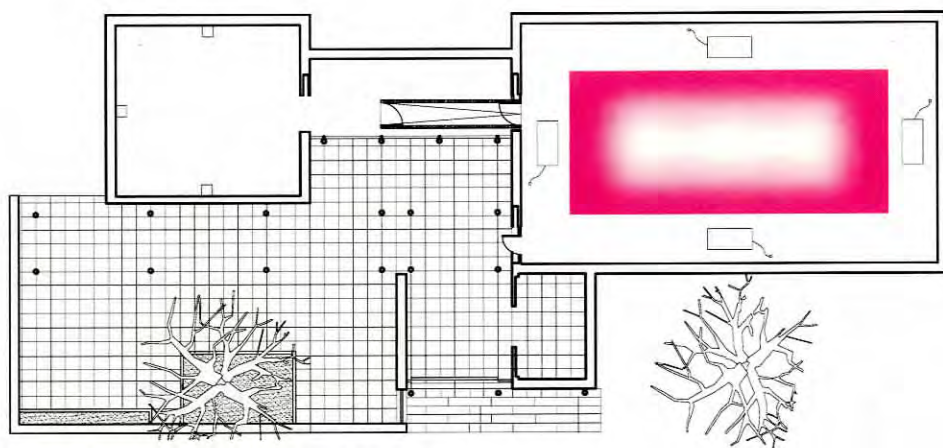


HORMONORIUM

DECOSTERD & RAHM

SWISS ARCHITECTURAL BIENALLE

2002



(TECHNOLOGY)(CLIMATE CONDITION) + TOUCH= HORMONORIUM

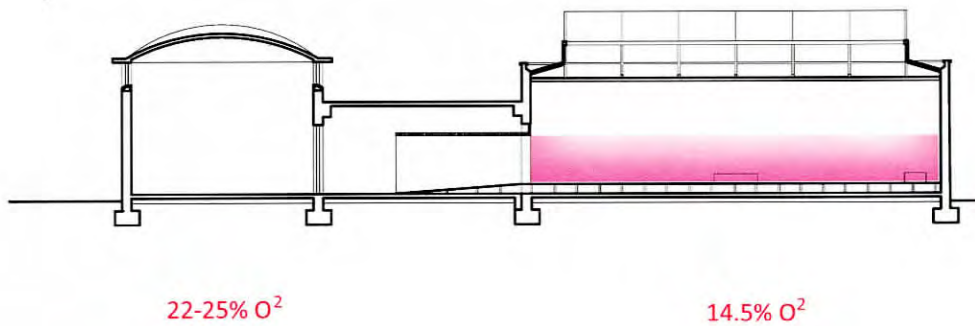


DIAGRAM: HORMONORIUM

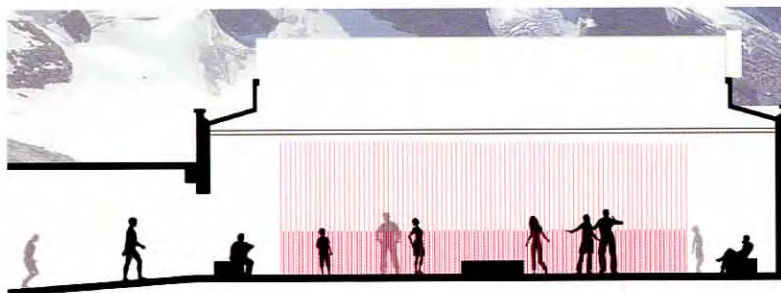
LEFT: PLAN

RIGHT: SECTION OXYGEN CHANGE

DESIGNED ATMOSPHERE



BEHAVIOURAL EMULATION



(TECHNOLOGY)(CLIMATE CONDITION) + TOUCH= HORMONORIUM

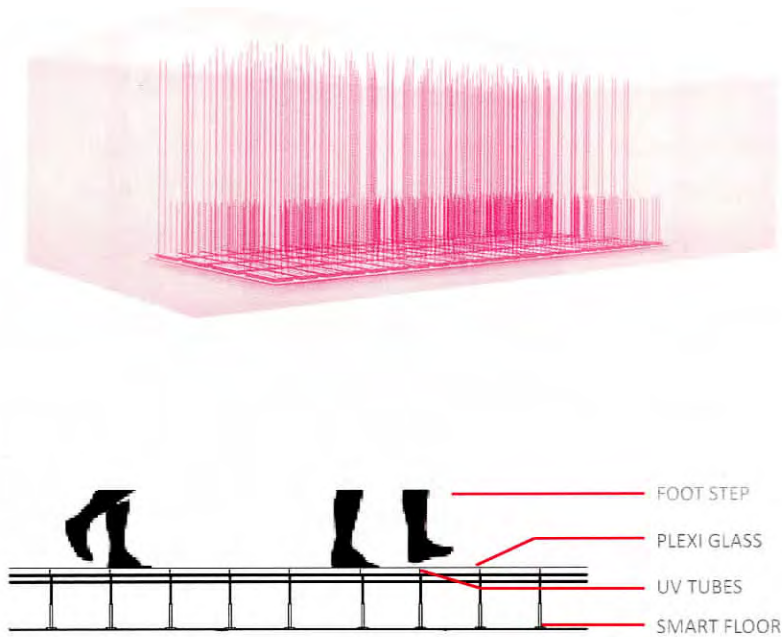


DIAGRAM: HORMONORIUM

LEFT: SECTION, BEHAVIOURAL EMULATION OF SWISS ALPS

RIGHT: PERSPECTIVE AND FLOOR SECTION

DESIGNED ATMOSPHERE

Philippe Rahm's competition entry in 2009 for the contemporary art museum in Wrocław, Poland is defined by the introduction of two of heat sources (similar to radiators), where one is registered at 16 degrees Celsius, while the other indicates 22 degrees Celsius. These two temperatures were chosen because they set the low and high temperature limits required for a museum in Poland (16 degrees Celsius corresponding to a storage space and 22 degrees Celsius corresponding to the maximum temperatures in an office.) These two heat sources in plan and section are placed opposing one another, the colder pole is placed higher than the warmer pole to create a thermodynamic imbalance.

They thus generate the entire museum atmosphere, composed of multitudes of climates and flow ranging between 16-22 degrees Celsius. These heat sources generate a sound as well as the natural convection flow.

Almost nothing in this volume is fully enclosed - the surfaces (ceiling, floor plates and walls) throughout the space are transparent and contain open slots, so air can move from space to space. One can recognize the invisible air movement not just by the temperature registration on ones skin but also by the sound of the air and its interaction amongst the walls, transparencies and slots. One can notice a different acoustic quality in the ex-



'CONVECTION MUSEUM' MUSEE KANTOR: COMPETITION

DECOSTERD & RAHM

CRACOW, POLAND

2006

hibition rooms because the slats are closed and sound is being monitored by the insulation placed in the thickness of the beams. The air flow manipulates the entire volume of the building as well as different climates, environments and qualities of space for various activities. The sound of the air movement is in contrast to pedestrian movement, therefore creating two different sounds: First, when a person is walking with the air flow and, second, when someone is walking in the opposing direction of the air flow.

The outer envelope of the building is isolated yet it contains the interior climate. This competition entry for the Convective

Museum deals with notions of temperature and convection flow, yet Rahm brings his notions of meteorology to the next level by engaging ones auditory sensory nodes. He does this through the materiality of surfaces, opening and closing of walls and the application of two different heat sources.

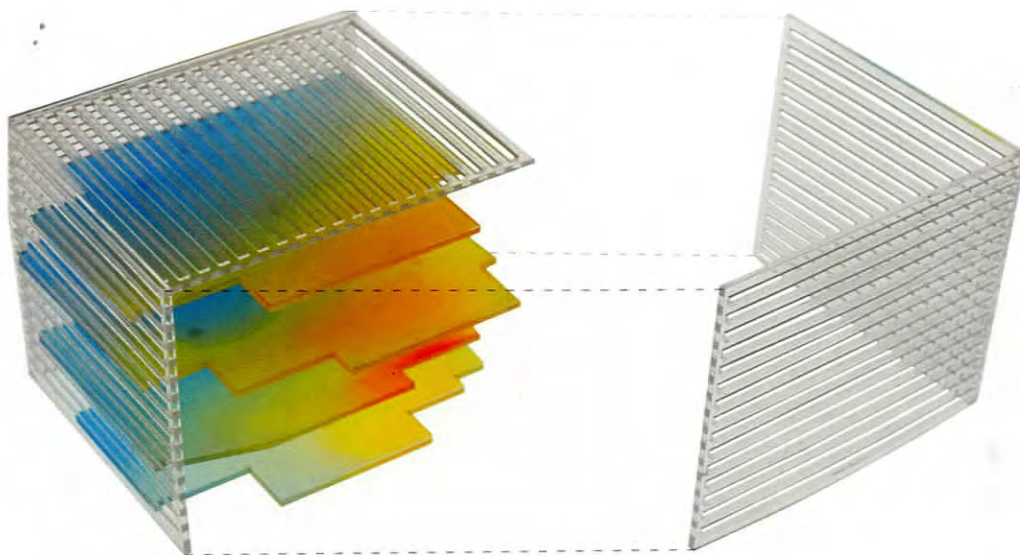


'CONVECTION MUSEUM' MUSEE KANTOR: COMPETITION

DECOSTERD & RAHM

CRACOW, POLAND

2006



(TECHNOLOGY)(CLIMATE CONDITION) + SOUND= CONVECTIVE MUSEUM

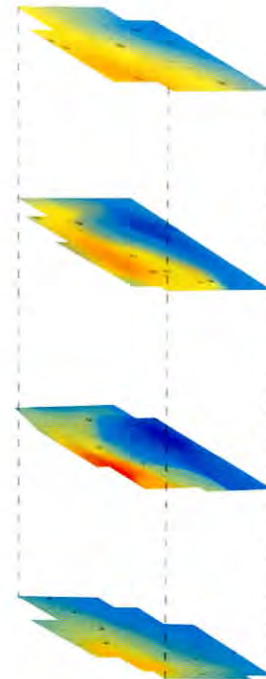
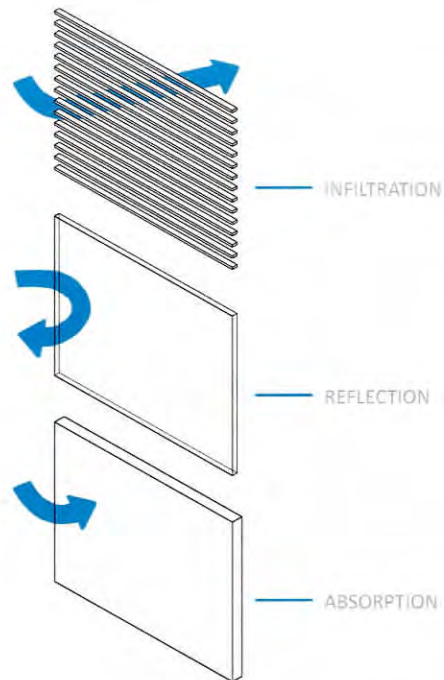


DIAGRAM: CONVECTION MUSEUM

LEFT: MODEL OF TRANSPARENT LAYERS

RIGHT: 3 SURFACE TYPES, TEMPERATURE OF FLOOR PLATES

VERTICAL DESIGNED ATMOSPHERE

In winter, when a person feels a chill, they immediately walk over to the thermostat/radiator and turn the dial to heat the space. This notion of turning a dial is in stark contrast to Descosterd & Rahms architecture. It is not about turning a dial to get a resultant. It is about creating distortions in latitude, bringing a climate that exists somewhere else in the world.

The winter house is located on the countryside of Vendee (outside of Paris) near a small river. The house needs to protect its occupants against the cold and harsh winter, therefore dealing with the technical engineering aspects of heating and ventilation systems not as secondary conditions but

as the primary determinates of the design.

Here Descosterd & Rahm propose an “artificial reproduction of a geographically localized, chemically determined climate,” specifically localized, chemically determined climate,”¹⁰ in a harsh winter climate at the choice of the occupant (Tahiti), the architecture becomes the air - invisible but physically modified. The heating system becomes a space for the production of this air, and contains not just the technical apparatus but also exotic plants, microorganisms and mineral substances from Tahiti, a region where the temperature is actually 20 degrees Celsius with 50 percent humidity. These plants, through photosynthesis



FABRICE HYBERT WINTER HOUSE: TAHITI

DECOSTERD & RAHM

VENDEE, FRANCE

2002-2005

and their emanations, determine the chemical quality of the air that will infiltrate into the living space through the heating system. The space, due to the exotic plants and microorganisms, do not just help us visually relate to a warmer climate but also change the aura through the olfactory. The exotic plants take over the house metonymically connecting the warm climate of Tahiti through scent.

(TECHNOLOGY)(CLIMATE CONDITION) + SMELL= WINTER HOUSE



FABRICE HYBERT WINTER HOUSE: TAHITI

DECOSTERD & RAHM

VENDEE, FRANCE

2002-2005



LATITUDE DISTORTION



(TECHNOLOGY)(CLIMATE CONDITION) + SMELL= WINTER HOUSE

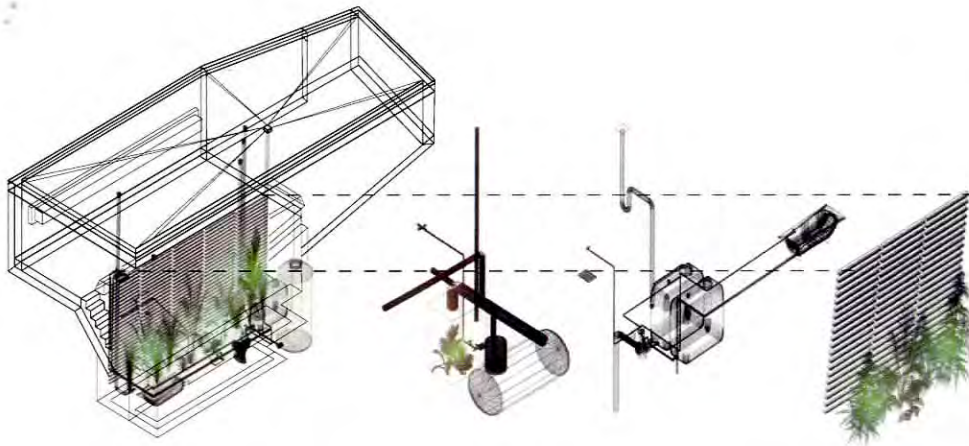


DIAGRAM: WINTER HOUSE

LEFT: SECTION, LATITUDE DISTORTION

RIGHT: AXON, ENHANCING SCENT

EXOTIC RELOCATION IN A COLD CLIMATE

The “Digestible Gulf Stream” exhibition was a micro-climate that related to temperature and gastronomy in order to create a spatial experience at the 2008 Architecture Biennale in Venice. The exhibition consists of two glossy white platforms connected by two horizontal metal planes which are extended at different heights. These platforms provide a setting for the performance - the space is inhabited by a lethargic, intermittently-dressed group, who could seek out the ideal climatic conditions for their current activities. These activities included typing on a keyboard, sleeping, playing cards and chatting in a circle.

An artist by the name of Piero Macola pro-

duced a set of drawings for this exhibition. Its location, however, was now in a removed forest clearing. The drawings portray the same distinct air of laziness as the exhibition did. The drawings depict the inhabitants in this forest clearing, rubbing warming/ cooling ointments onto each other’s backs, while they read, sleep and bath in the sun. This lotion relates architecture as gastronomy. Rahm uses culinary/pharmaceutical applications to the two glossy white plates that directly stimulate the sensory receptors. The hot plate contains chili peppers and cold accommodates mint, thus stimulating the salivary glands. The lotion can be eaten or applied to the body and in the exhibition, specifically the white plates.

(TECHNOLOGY)(CLIMATE CONDITION) + TASTE= DIGESTIBLE GULF STREAM



DIGESTIBLE GULF STREAM

PHILLIPE RAHM

VENETIAN ARCHITECTURAL BIENALLE

2008

"The first preparation, on the upper cold plate, which contains mint, has molecules of crystalline origin known as menthol that cause the same sensation in the brain as the coolness perceptible at a temperature of 12 degrees Celsius. The menthol activates the Transient Receptor Potential (TRPM8) molecular sensory receptors on the skin and in the mouth that stimulate the group of peripheral sensorial neurons known as cold-sensitive units. The second composition, on the lower hot plate, which contains chili, has one of the molecules, capsaicin, activates the neuro-receptor TRPV1, which is sensitive to temperatures of 28°C." ¹¹

Like a miniature Gulf Stream, the plate's position generates air movement using the natural phenomenon of convection, thus creating a constant thermal flow, akin to an invisible landscape. In this case the architecture is literally structured on air current, where the taste of the hot chili and cool mint affects the occupant's experience of that space.

7 Le Corbusier, *Preconcrets* (MIT Press (Cambridge, MA) 1993), pg. 7

8 Laffy, Sean, "Meteorological Architecture (Philippe Rahm)" Ed. Helen Cardie - *Emerging New Material Boundaries Architecture Design* (2009) - pg. 32

9 Banham, Reyner, *Architecture of the Well Tempered Environment*, 2nd ed. Chicago: University of Chicago, 1984

10 Rahm, Philippe, Marie-Ange Brayer, Noh Cayezel, Pedro Gadarnho, Christopher Kallenbach, Maniké Rosy, Marco Michelli, and Brémont Louise, *Detumescens*, Orleans, France: HXX, 2004, pg. 14

11 Rahm, Philippe, "Digestible Gulf Stream", Philippe Rahm, Web Roll 2009



DIGESTIBLE GULF STREAM

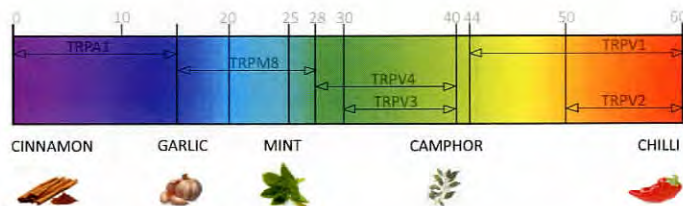
PHILLIPE RAHM

VENETIAN ARCHITECTURAL BIENALLE

2008



SURFACE TEMPERATURE [° F]



- TRPA1 transient receptor potential ankrin transmembrane protein
- TRPM8 transient receptor potential melastatine 8
- TRPV4 transient receptor potential vanilloide 4
- TRPV3 transient receptor potential vanilloide 3
- TRPV2 transient receptor potential vanilloide 2
- TRPV1 transient receptor potential vanilloide 1



DIAGRAM: DIGESTIBLE GULF STREAM

LEFT: CONECTIONCURRENT, EAU DE CHALEUR CREAM QUALITIES

RIGHT: ILLUSTRATIONS BY PIERO MACOLA

EXOTIC RELOCATION IN A COLD CLIMATE

"The technology expanded and strengthened eye today penetrates deep into matter and space, and enables man to cast a simultaneous looks on the opposite side of the globe".

- David Harvey¹²

4

"The eye collaborates with the body and the other senses . One's sense of reality is strengthened and articulated by this constant interaction. Architecture is essentially an extension of nature into the man- made realm, providing the ground for perception and the horizon of experiencing and understanding the world. The eye needs to collaborate with the senses. " ¹³

Invisible architecture is hard to draw (except, for example, when drawing music notes to implicate sound). The non-dismissive senses are rarely considered or communicated in architectural drawings and for the most part do not play a role in mainstream architectural

design. In general, perhaps temperature is like sound, smell, taste and touch - it is not apart of the standard architects' toolkit of space, light and form, yet so it is easily ignored. This eventually leads to architects passing off design controlled elements to other people, like engineers or, even worse, to chance. These elements become a part of an "after the fact" architectural design.

However, the invisible can be incorporated into a primary design element, yet most architects don't want to get involved with this scope of phenomenological design. This is ultimately hindering architectural potential because the invisible conditions are what make



MAGRITTE POSING IN FRONT OF HIS PAINTING

RENÉ MAGRITTE

BRUSSELS

1961-1967

up our experience of space.

By making the invisible visible through graphic projection we can perhaps alter the way architectural space is experienced by allowing architects to explore this path, thus altering traditional phenomenology and making it less experimental.



MAP OF THE INTERNET

NOVEMBER 23, 2003

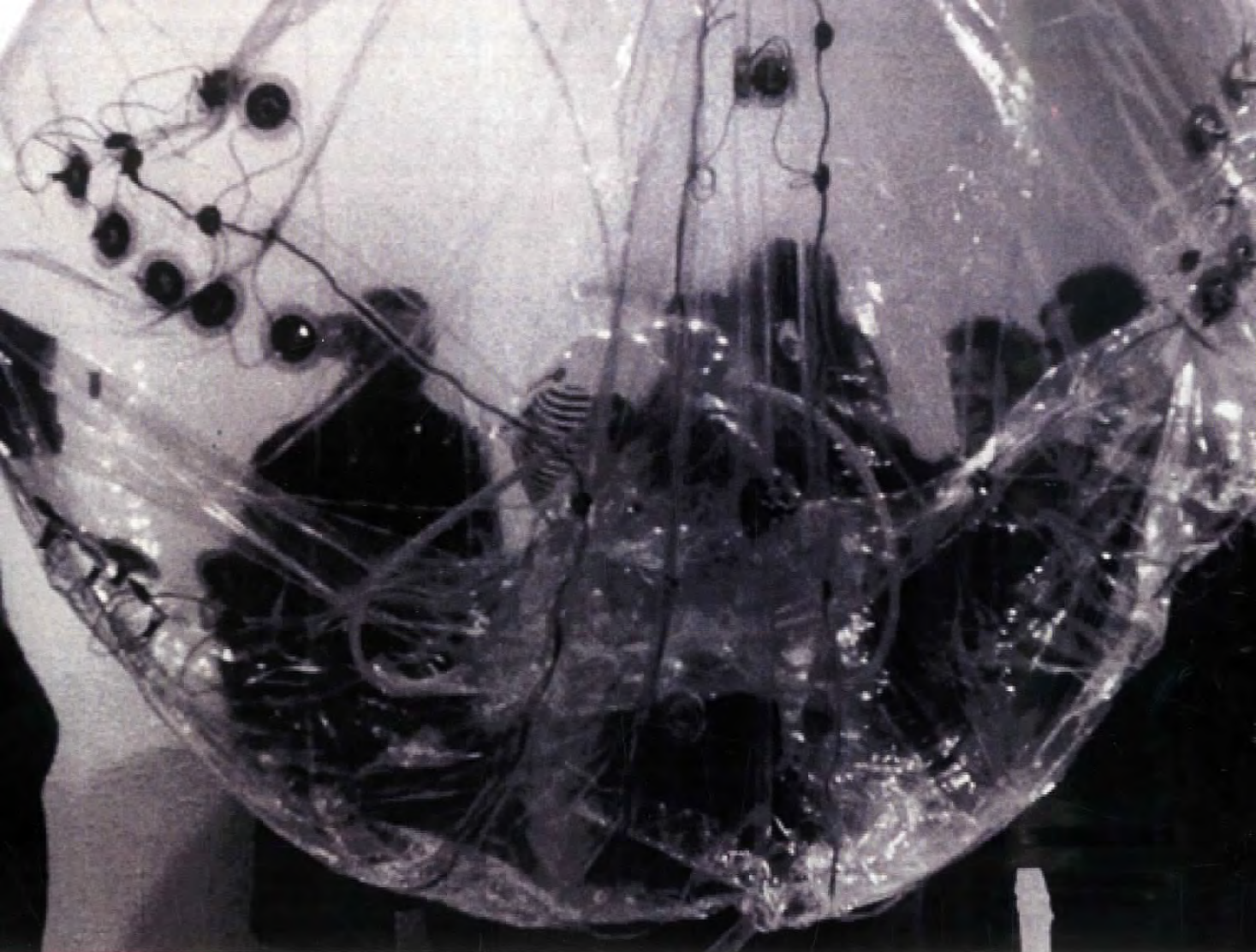
Touch is the most tangible of the senses which, therefore, has a more obvious effect on our experience and understanding of space. The very essence of lived experience is molded by hapticity.

The sense of the tactile can also be something intangible, perhaps of a more perceptive and invisible quality. The skin is capable of distinguishing texture, weight, density and temperature of an object or matter, so through this invisible sensation we can begin to experience a space without physically touching an obvious object.

For example, the Astro Balloon 1969 was re-

invented at the 2008 architecture biennale in Venice by COOP HIMMELB(L)AU entitled "Feedback Space." This interactive installation uses the participants' heartbeat, which is detected by hand sensors to read their heart beat. This all occurs in a futuristic clear bubble environment. This bubble membrane contains four LED Screens where the participants heart beat is visually displayed. The resulting installation is a cloud-like, semi-transparent floating internal space which uses the human heartbeat in real time.

Wolf D. Prix, one of the three founders of COOP HIMMELB(L)AU, explains this project while at the architectural Biennale in



ASTRO BALLON

EXPERIMENT

EUROPE

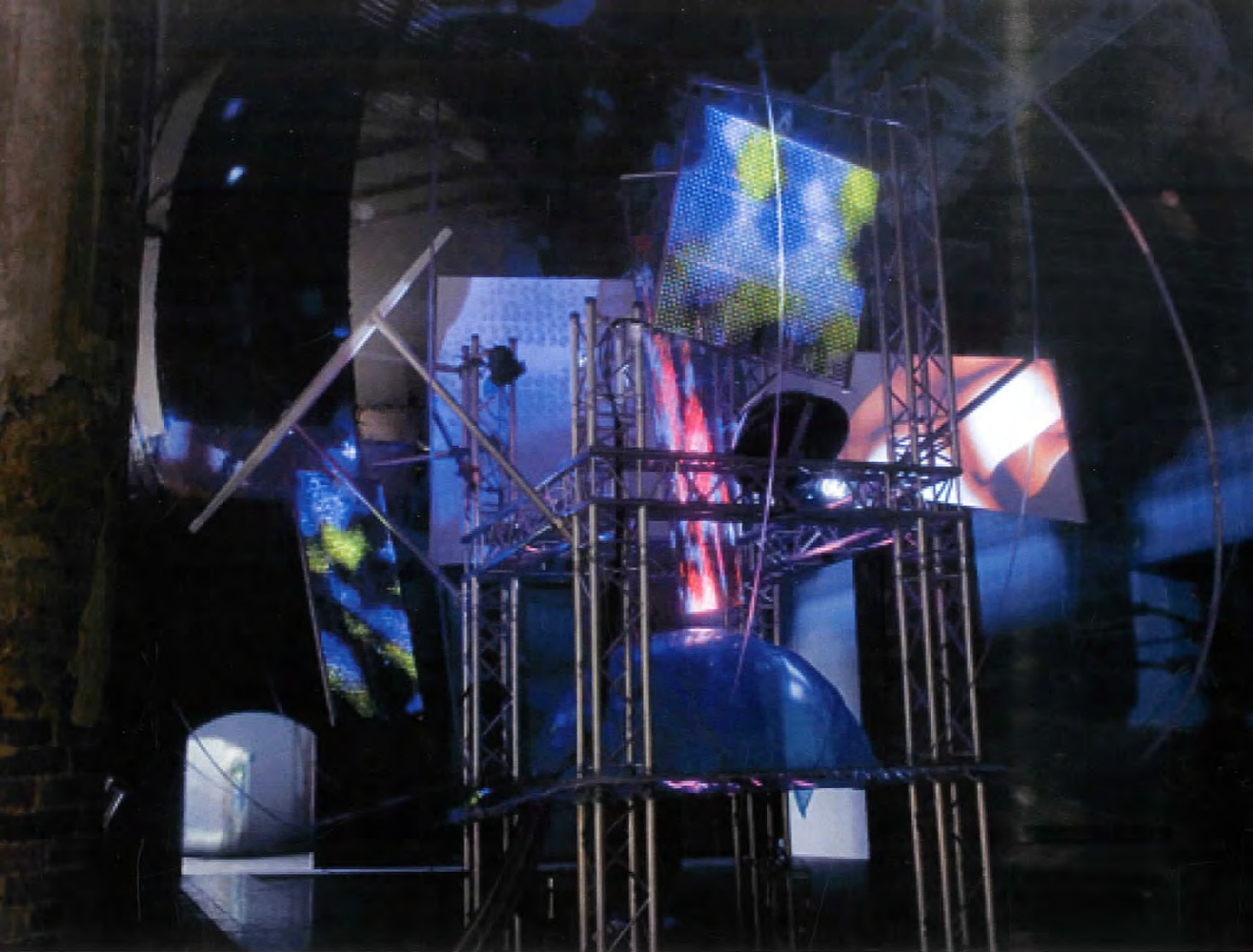
1969

2008:

"The theoretical background of our work is that we say not that architecture is changing the human being but the human is able to change architecture. This mean that it is a theoretical contribution, your body is changing the space. If an arch doesn't want to change the world or the society with his building he stays a builder, this is then not architecture, it is just a building. When thinking isn't the mentor of his project its like a decaf espresso; decaf architecture looks like architec-

ture looks like architecture smells like architecture but it is not architecture it is just a building because it is not coffee." ¹⁴

Therefore, through the technology of the joy stick mechanism, this project expresses the invisible which is the displayed graphically on the LED screens. Vision is in juxtaposition to touch.

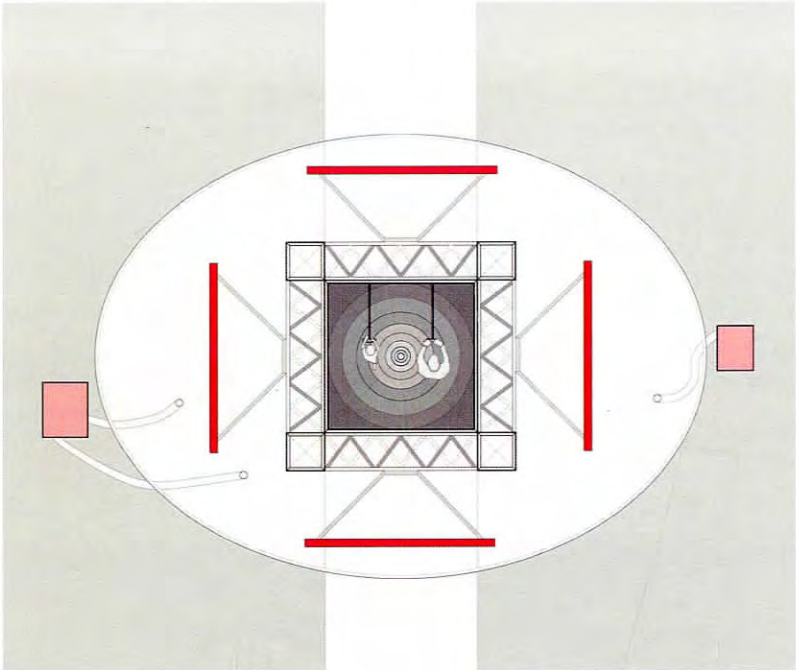


ASTRO BALLON 1969 REVISITED- 'FEEDBACK SPACE'

COOP HIMMELB(L)AU

VENETIAN ARCHITECTURAL BIENALLE

2008



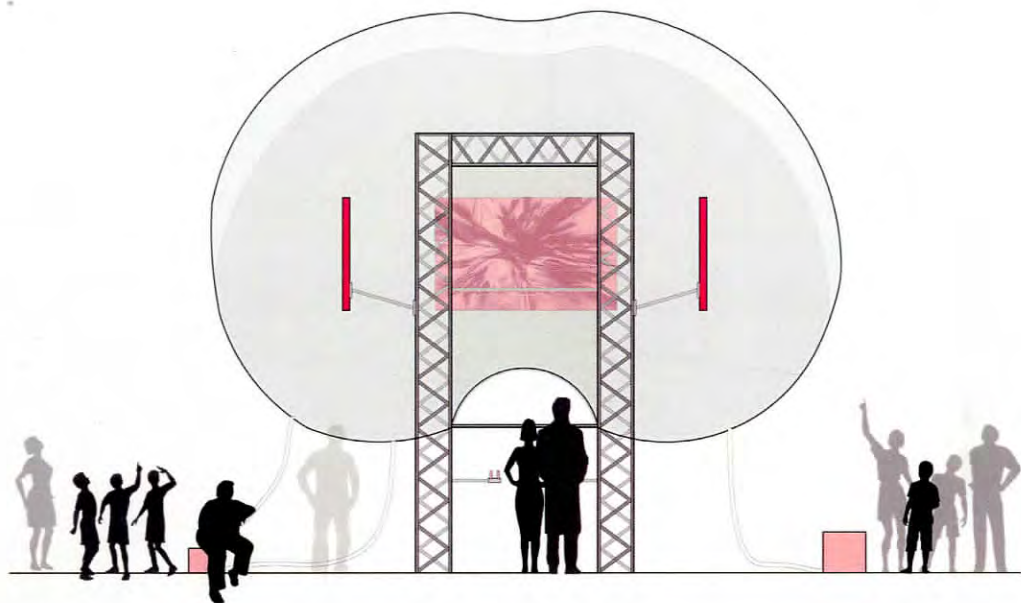
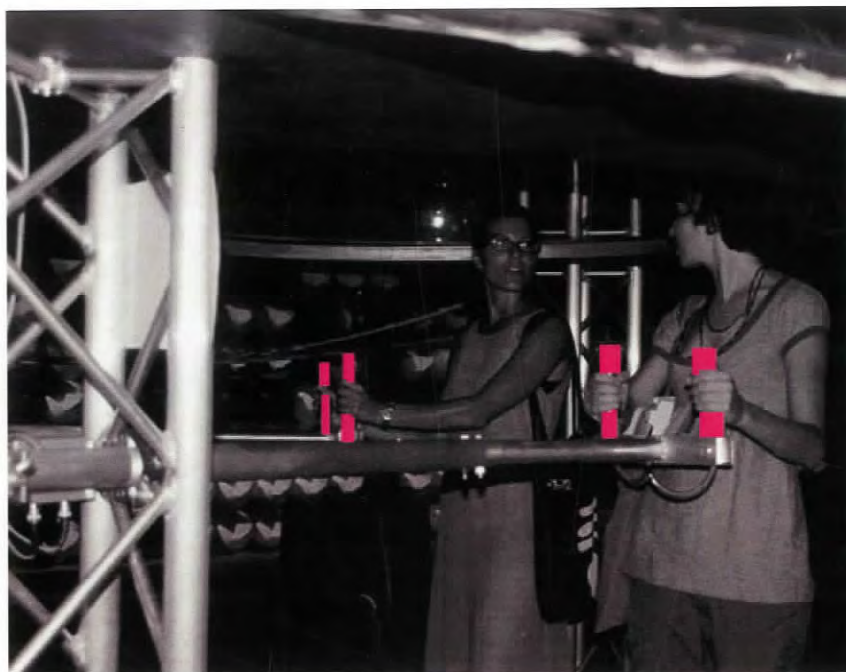


DIAGRAM: "FEEDBACK SPACE"

LEFT: PLAN

RIGHT: SECTION

TOUCH VISUALLY PROJECTED



SEE WHAT I TOUCH

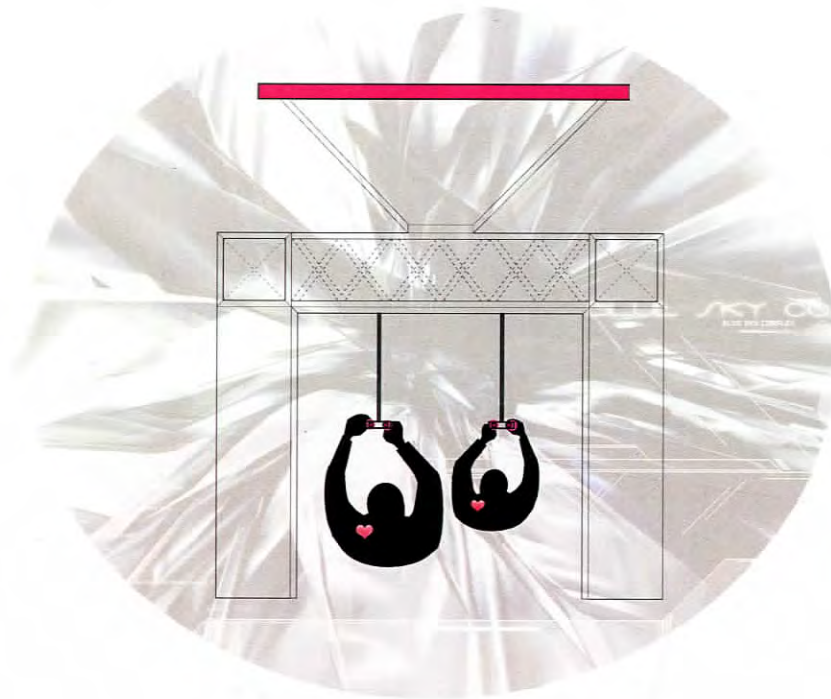


DIAGRAM: 'FEEDBACK SPACE'

LEFT: JOYSTICK MECHANISM

RIGHT: PLAN OF CONNECTION OF JOYSTICK AND LED SCREEN

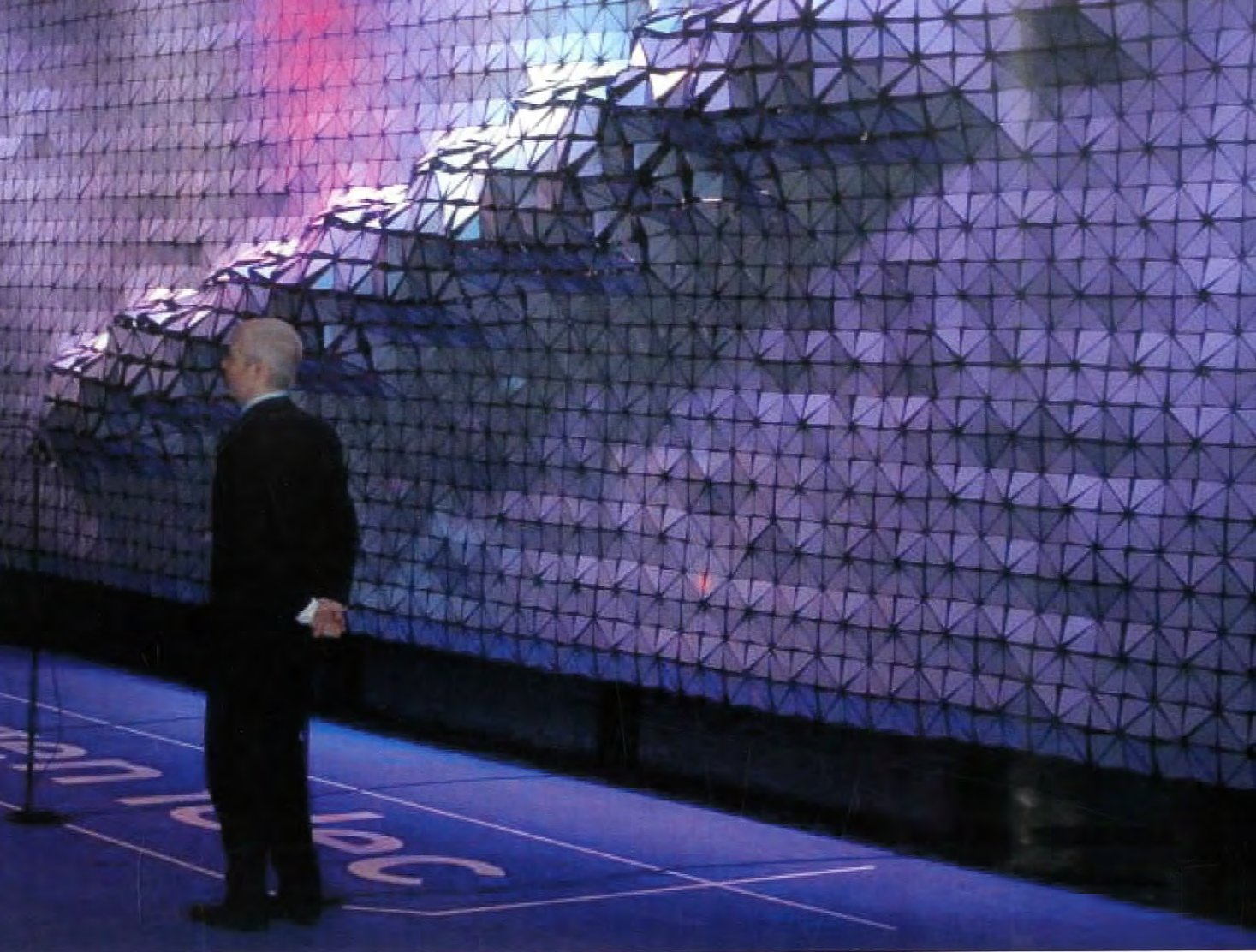
TOUCH VISUALLY PROJECTED

In architecture, seeing a building is a visual experience that can capture a gaze however the building can also incorporate the experience of sounds. A space should be understood and appreciated by its visual shape, but also, perhaps, through its echo upon its numerous surfaces which can help us employ experience.

Sounds incorporate its surroundings where as the eye sees what is in front of it. The interior of the mind can vividly sculpt an image of a dripping faucet, due to the sound of water hitting a hard surface. Acoustics usually remain an unconscious background experience which ultimately affects our experience

of a space. For example, throughout the film *Play Time* there is little to no dialogue, sound is a clear exploration of a background experience, however it helps the overall theme of the movie, visual distraction, be portrayed through the constant background noises of the loud city.

Some designers have rejected this conventional notion of sound being a part of a background experience. For instance, Mark Goulthorpe's *Hyposurface* sound wall was first exhibited at the Venetian Architectural Biennale in 2000. The *Hyposurface* wall by nature is interactive. It is a digital system where sensors pick up any digital input such



HYPO-SURFACE WALL

MARK GOULTHROPE

BIO WEEK IN BOSTON

2007

as movement, or in this case sound, and in return produce an output. Here, three microphones register sound quality and volume which is translated to concentric waves on a three-dimensional surface. The surface behaves like controlled liquid: waves, patterns, logos, even text emerge continually within its dynamic surface. The human eye is drawn to physical movement based on sound. Technology has evolved the theory of architecture that vision can juxtapose sound to become apart of a primary interactive experience.

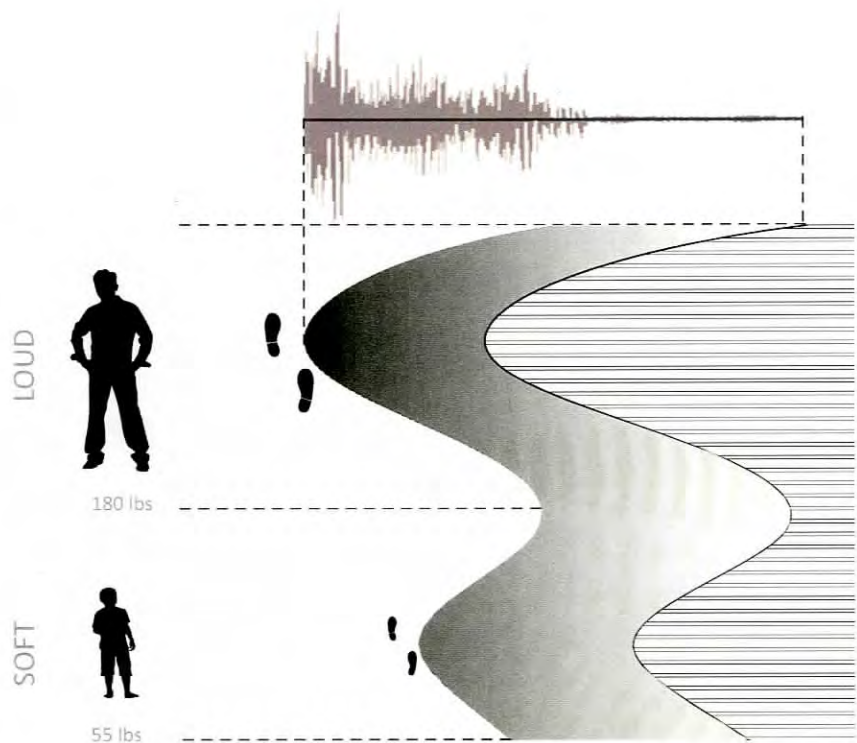


HYPO-SURFACE WALL

MARK GOULTHROPE

BIO WEEK IN BOSTON

2007



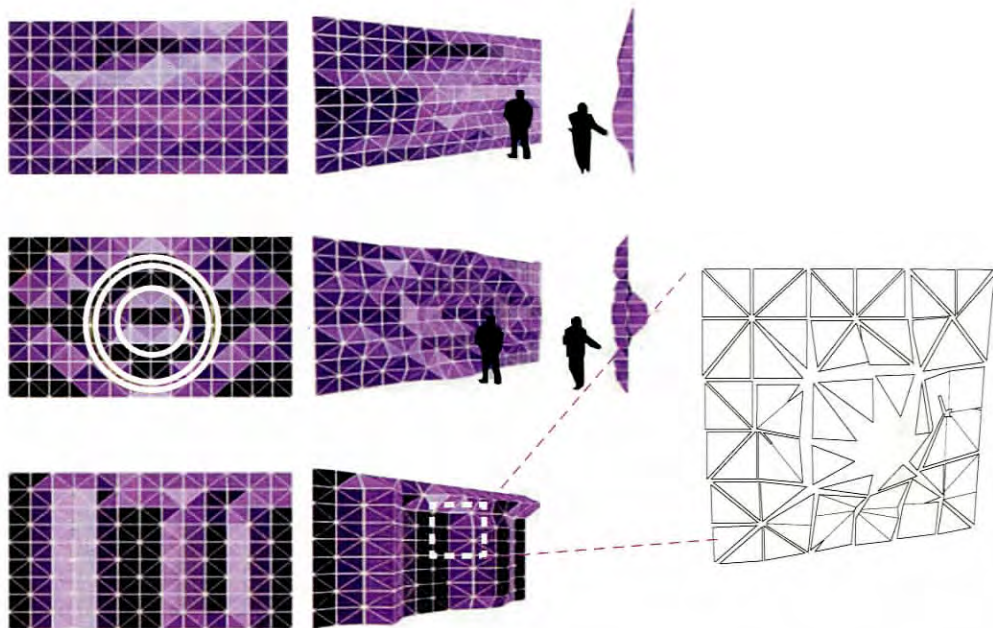


DIAGRAM: HYPO-SURFACE WALL

LEFT: PLAN, FOOTSTEP AFFECTING WALL

RIGHT: WALL MOVEMENT DETAIL

SOUND VISUALLY PROJECTED

Odors are associated with day-to-day experience,* subconsciously reminding us of the olfactory structure which are mainly invisible even though they are almost always active and meaningful in the way we experience a place. In Oliver Sack's book *The Man who Mistook His Wife for a Hat* states "You smell people, you smell books, you smell the city, you smell the spring-maybe not consciously, but as rich unconscious background to everything else".¹⁵ Odors are not only profoundly inherent components of place, but at times are actually essential in defining them. Odor is a powerful vehicle for memory which penetrates into our deepest recollections. "The persistent memory of any space is often odors. Helen

Keller was able to recognize an old fashion country house because it had several levels of odors left by families, plants, perfumes and draperies."¹⁶

The increasing attention dedicated to odors in recent years has been driven practically by the possibilities offered by new technologies in defining architectural and urban spaces. This might have been driven by the 1981 John Waters comedy film *Polyester* (inspired by the William Castle film in 1960 *Scent of Mystery*) where the audience received scratch and sniff cards and the viewers could smell what they saw on screen with its corresponding numbers. The scratch and sniff cards were



EXHIBITION 'PESCE FOR LUNCH'

GAETANO PESCE

NEW YORK CITY

2005

a gimmick to place you spatially in the film. One becomes more emotionally engaged with the film and can comprehend on a multi-sensorial level. Communications media have lead to two different behaviors regarding the olfactory perception; solely concentrated on developing technologies of the visible and audible.

The connection of the visual and audible are apparent the exhibition "Pesce for Lunch," in New York in 2005 designed by Gaetano Pesce. This exhibit was made with actual food which evoked the style, fragrance, flavor and color of Italy. Recognized for his use of color, functionality and warmth, Pesce's creation fea-

tured oceans of olive oil and seas of balsamic vinegar, overhung by parmesan cliffs and forests of basil, rosemary and broccoli. He categorized his physical landscape where mountains were made of dairy, acres of herbs, sea of liquids and sky's meat, like one would find in an Italian hill town. "Pesce for Lunch" is an imaginary landscape where food has become the basic element that induces memory of a place. It is hard to wonder through this exhibit without the smell of Italy eradicating your taste buds and inflowing images or even personal memories of Italy.



EXHIBITION "PESCE FOR LUNCH"

GAETANO PESCE

NEW YORK CITY

2005

LANDSCAPE PROGRAM	INGREDIENT ELEMENTS
Tree Plant	
Mountain	
Ocean Lake	
Ground Texture	
Sky Hangings	

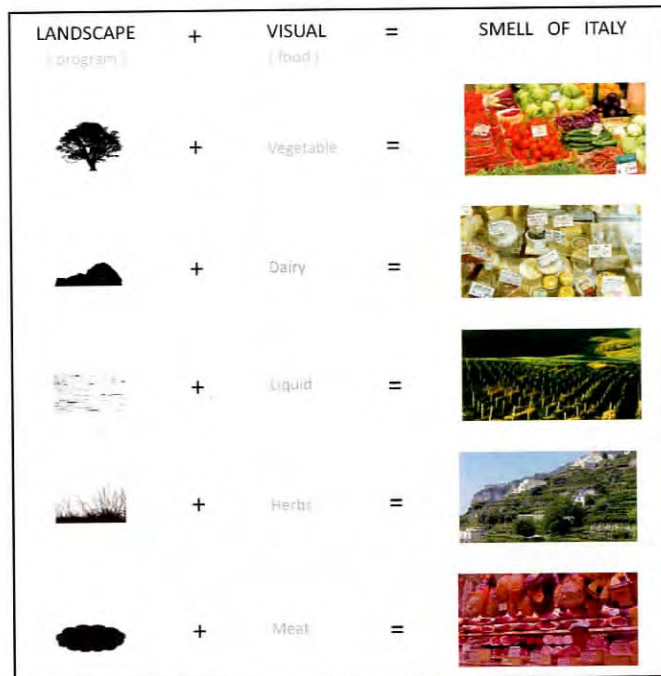


DIAGRAM: 'PESCE FOR LUNCH'

LEFT: CATEGORIZING SMELL

RIGHT: LANDSCAPE CATEGORIES

SMELL VISUALLY PROJECTED

Vision is transferred through the experience of taste. One example of the visual transference through taste is Tatfoo Fans Nature Matching which serves as a reminder to consume your daily recommended doses of color. The shades of color displayed at the farmers markets are more than skin deep, reflecting the inner potential of every fruit and vegetable - intense colors might even be called nature's nutrition labels. Color is a device that can be deceptive (for example, Gushers junk food is marketed in bright colors its flavors are simulated artificial fruit extract), however, Tatfoo's Fans NMS ensures the decrease of unhealthy eat-

ing habits. The colors of the NMS visually evoke oral sensations, where color is visually associated with healthy eating.

Junichiro Tanizaki states through his works *The Tea Ceremony* "With lacquerware there is a beauty in that moment between removing the lid and lifting the bowl to the mouth when one gazes at the still, silent liquid in the dark depths of the bowl. What lies within the darkness one cannot distinguish, but the palm senses the gentle movements of the liquid, vapor rises from within forming droplets on the rim, and a fragrance carried upon the vapor brings a delicate anticipation... A moment of mys-



NMS- NATURE MATCHING SYSTEM

TATFOO TAN

DUMBO BROOKLYN

2008

tery, it might almost be called, a moment of trance.”¹⁷ Through this quote, Tanizaki explains that in order to receive a full satisfaction we must visually connect with the “bowl of soup” before tasting it. Just like the Tatfoo Tan does in the NMS, one must juxtapose the visual with taste in order to gratify an experience.

¹² Harvey, 261, 307
¹³ Lally, 24
¹⁴ Pmk, Wolf D. “Up in the clouds with COOP HIMMELBLAU.” Web. Fall 2008. <<http://www.youtube.com/watch?v=triUgxxvLIx>>
¹⁵ As quoted in Barbaro, Anna, and Anthony Periss. *Invisible architecture: experiencing places through the sense of smell*. 1st ed. Milano: Skira, 2006. pg. 125
¹⁶ Diane Ackerman, *A Natural of the Senses*, Vintage Books (New York), 2005, p. 45
¹⁷ Rakuzo, Okakura, *The book of tea*. Trans: Liza Dalbury. Boston: Tuttle Pub., 2000, pg. 15



NMS- NATURE MATCHING SYSTEM

TATFOO TAN

DUMBO BROOKLYN

2008



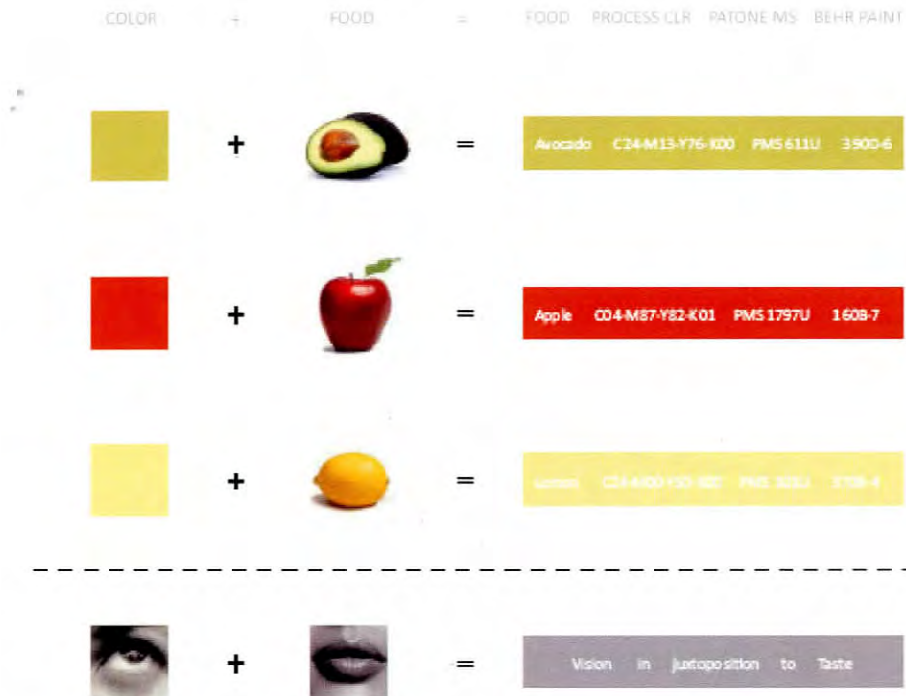


DIAGRAM: NMS- NATURE MATCHING SYSTEM

LEFT: GENERAL COLOR CORRELATION TO FOOD

RIGHT: DETAIL COLOR CORRELATION TO VISUAL

TASTE VISUALLY PROJECTED

“Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity”.

—John F. Kennedy¹⁸

5

Contemporary Fitness Centers and Spas are all about image; where numerous beings within the same space are checking one another out, enviously comparing bodies and then reflecting on their own. The plastering of mirrors within the fitness center only adds to this narcissistic behavior. The original spas were arranged around notions of relaxation and serenity, yet now they have transformed into a beautification process. These spaces are described by its influx of hyper-imagery which is ultimately a reflection on contemporary society

Within a fitness center the odors amongst sweaty bodies, the sounds of the equip-

ment and the taste of our energy drinks all heighten our senses. Within a Spa all senses are amplified due to the temperature of waters and other tranquil effects. However, designing these spaces where the senses are graphically projected through technological means will allow the client to become aware of their heightened sensory experience and also educate them on their body and fitness.



'MAN WORKING OUTR'

QUIT SMOKING BULLETIN

CHICAGO

2006

The Downtown Athletic Club creates a spectrum of experiences through its multiple themed floor plans. "The club represents the complete conquest- floor by floor- of the skyscraper by social activity; with the Downtown Athletic Club the American way of life, know-how and initiative definitively overtake the theoretical lifestyle modifications that the various 20th century European avant gardes have been insistently proposing, without ever managing to impose them." ¹⁹

The New York Athletic club is not just a fitness center it's about social interaction amongst business men who were trying to

obtain their high social status. The NYAC floors 1-15 were only for men, this building is considered a multi story bachelor pad.

The notion of multi-functions undefined by any exterior composition was a unique quality in a skyscraper for the time it was built and even today. The skyscraper suggests that like the metropolis no single specific function can be matched with a single space or envelope. This building emulates society's needs for multiple functions on an individual platform which can be ceaselessly adapted not affecting the overall framework.



NEW YORK ATHLETIC CLUB

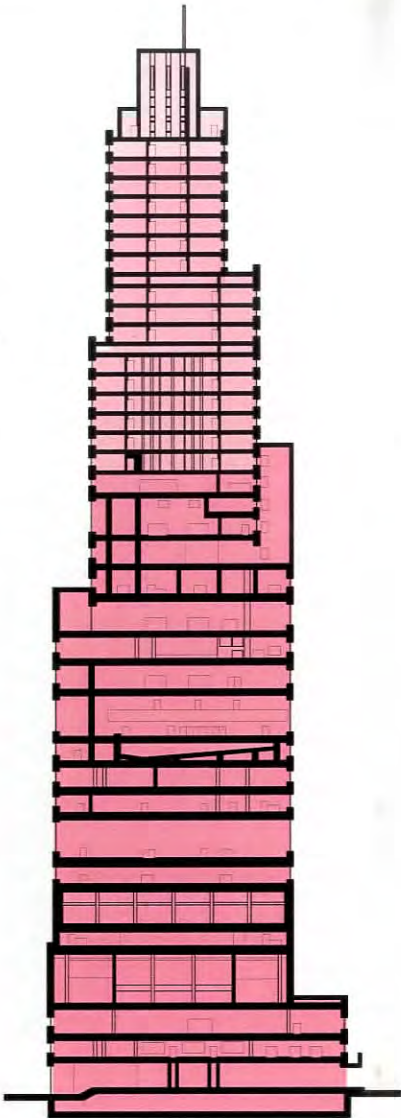
STARRETT & VAN VLECK

WASHINGTON ST, MANHATTAN

1931

NEW YORK ATHLETIC CLUB PROGRAM

ROOF	UTILITY
FLOOR 36	BEDROOMS
FLOOR 20-35	PRIVATE DINING
FLOOR 19	
FLOOR 18	LOUNGE
FLOOR 17	ROOF GARDEN
FLOOR 16	UTILITY
FLOOR 15	KITCHEN
FLOOR 14	GRILL
FLOOR 13	POOL BALCONY
FLOOR 12	SWIMMING POOL
FLOOR 11	LOCKER
FLOOR 10	MEDICAL BATH
FLOOR 9	LOCKER
FLOOR 8	GYMNASIUM
FLOOR 7	GOLF
FLOOR 6	SQUASH
FLOOR 5	LOCKER
FLOOR 4	HANDBALL
FLOOR 3	BILLARDS
FLOOR 2	ADMINISTRATION
FLOOR 1	LOBBY





Downtown Athletic Club
North of Battery Park

Dense Vertical Program

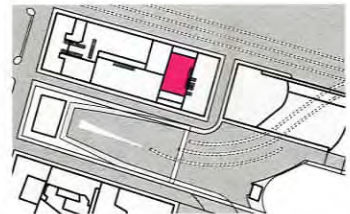


DIAGRAM: NEW YORK ATHLETIC CLUB

LEFT: SECTIONAL PROGRAM

RIGHT: SITE PLAN



FITNESS CENTER: AESTHETIC QUALITY



WELLNESS SKY FITNESS CENTER

4 OF 7

BELGRADE, SERBIA

2009

Gymbox is an original type of fitness center known for its unique program. It is considered a 'gym with a new attitude'. There are three locations within the London area.

This trendy gym has DJ's for every class offered thus resembling a high end frantic night club. Kangoo (sneakers that act like pogo sticks), hip hop, Rave-laser-lit dance studio's are some of the names of classes offered. These spaces offer neon lighting, film projections, split level flooring and a 'floating' dance studio (this is the space that turns into a night club at the flip of a switch). Gymbox is on the cutting edge

and transforming the style of and old traditional gym to something a bit more upbeat that attracts the fast past city goers.

18 "The Federal Government Takes on Physical Fitness" John F. Kennedy Public Library & Museum, Malvern Pa. Web. 190. 2009.<<http://www.jfklibrary.org/Education/ThreeFederal-Government-Takes-on-Physical-Fitness.htm>> as quoted in Kennedy John F. U.S. Official Physical Fitness Program. Ed. Paul Wilkinson.

19 "Business: Rave Fitness" New York & Retroactive Magazine Manhattan. 2009. New York: Monthly. 1994. pg 15.



GYMBOX, CONVENT GARDEN BRANCH

BEN KELLY ARCHITECTS

ST. MARTINS LANE, LONDON

2007

Les Bains Des Docks aquatic center/ bathhouse is located in the historic city of Port Havre, France. This is one of many redevelopment projects within this soon to be revitalized area. This post modern complex consists of 130,000 square feet, filled with interconnected pools, water channels, steam rooms and hydrotherapy areas. "Each chamber of Les Bains des Docks, as the spectacular compound is called, is a poetic jumble of monolithic white squares and rectangles called classical ruins" .²⁰

Jean Nouvel breaks from the contemporary bathhouses and explores waters poetic potentials like in Roman lagoons. He was inspired

by the Roman Empire thermal baths and uses this traditional sequence to program the spaces through the complex. For instance the sequence at the Roman bath of Diocletian starts off in a sauna or steam room, and from there the occupant has the option to progress from the caldarium (hot) through the tepidarium (warm) and concluding in the frigidarium (cold), or they can go straight to the frigidarium. This methodology dealt with the cleansing of the body where the hot air/ water would open the pores and the cold waters would close them.

The Roman baths were oriented to the southwest so that solar energy would help main-



LES BAINS DES DOCKS

JEAN NOUVEL

PORT LE HAUVÉ, FRANCE

2008

tain the hot temperatures of the caldarium, not affect the frigidarium.

Nouvel oriented the hot pools towards the south west; his complex consists of twelve programmed pools with ranging temperatures. One starts in the hot pool indoor pool and ends in the colder children's pool. This is a modern interpretation of the Roman thermae meshing with contemporary society needs.

The interior is in stark contrast to its grey facade, where all the surfaces are covered in white mosaic tile which were favored in Roman and Byzantine art. The childrens space is the only area of playful color. There are de-

ployed skylights, large windows and translucent/ water walls for maximum natural light. There is a total of twelve pools, including an outdoor heated lap pool, several leisure pools, children's whirlpool as well as a sauna, hammam, spa, a center of balneotherapy and fitness center.

Following the roman model, there are pools filled of hot and cold baths with Turkish fountains, sprays and soothing rays that spill into one another.

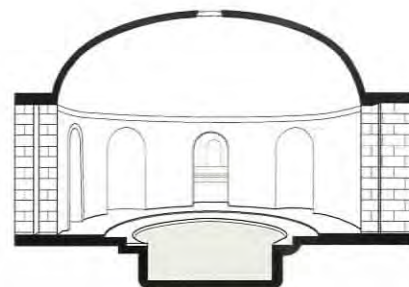
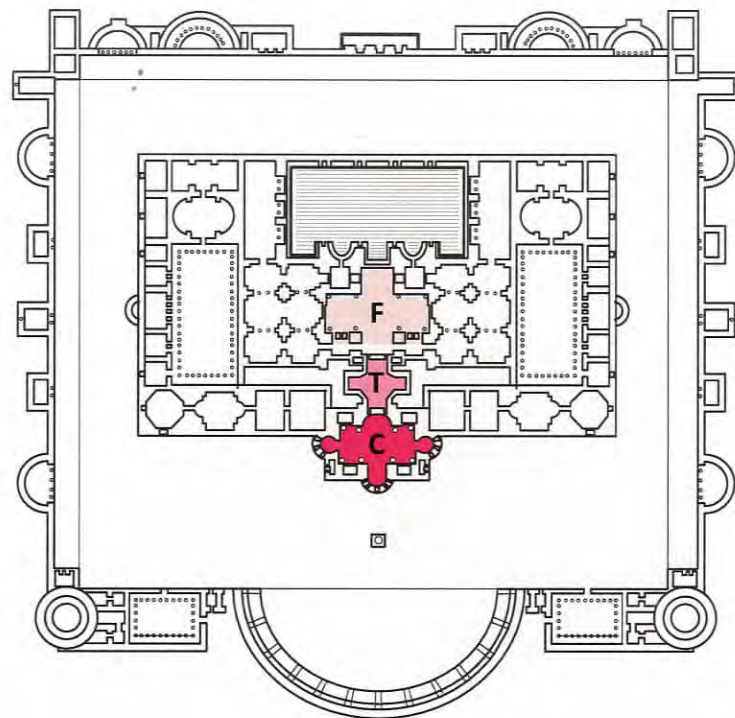


LES BAINS DES DOCKS

JEAN NOUVEL

PORT LE HAÛVE, FRANCE

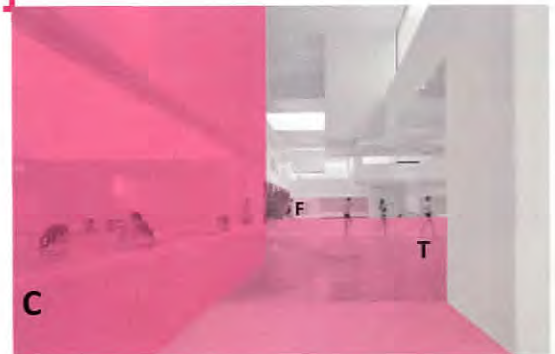
2008



FRIGIDARIUM



TEPIDARIUM & CALDARIUM



THERMAL BATHS

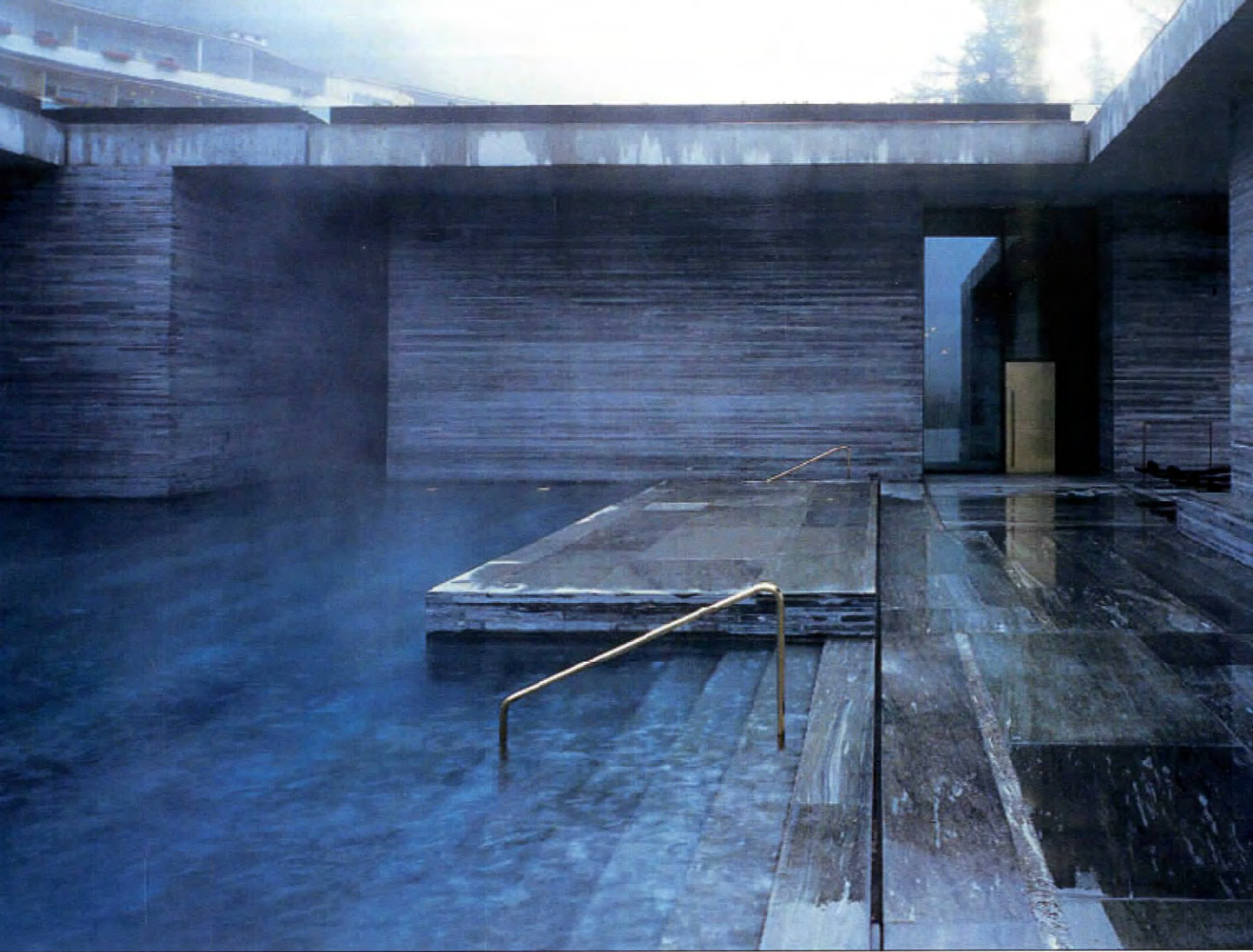
LEFT: PLAN-BATH OF DIOCLETIAN

RIGHT: PLAN AND SECTION- LES BAINES DES DOCKS

Inspired by the breathtaking surroundings, Peter Zumthor designed Vals spa on a sharp Alpine mountain, where its architectural elements (such as the green roof) mimic its natural site conditions. The spa embodies connections between mythology, bathing and purity creating a complete sensory experience. Zumthor carefully designs paths of circulation which lead bathers to certain predetermined points but lets them explore other areas for themselves. The circulation and act of bathing in Vals Spa was influenced by the Turkish Baths in Budapest. The perspective is always controlled. "The meander, as we call it, is a designed negative space between the blocks, a space that connects everything as

it flows throughout the entire building, creating a peacefully pulsating rhythm. Moving around this space means making discoveries. You are walking as if in the woods. Everyone there is looking for a path of their own." ²¹

An analysis of the chemical composition of the water clearly shows that mineralization occurs in the Trias strata (various rocks found on site in the Vals Valley, ranging from white marble, limestone to grey slate). The mineralization found in the waters can be broken down as follows: calcium, magnesium, sodium, chloride, fluoride, iron, iodide, potassium, manganese, hydrogen carbonate and sulphate.

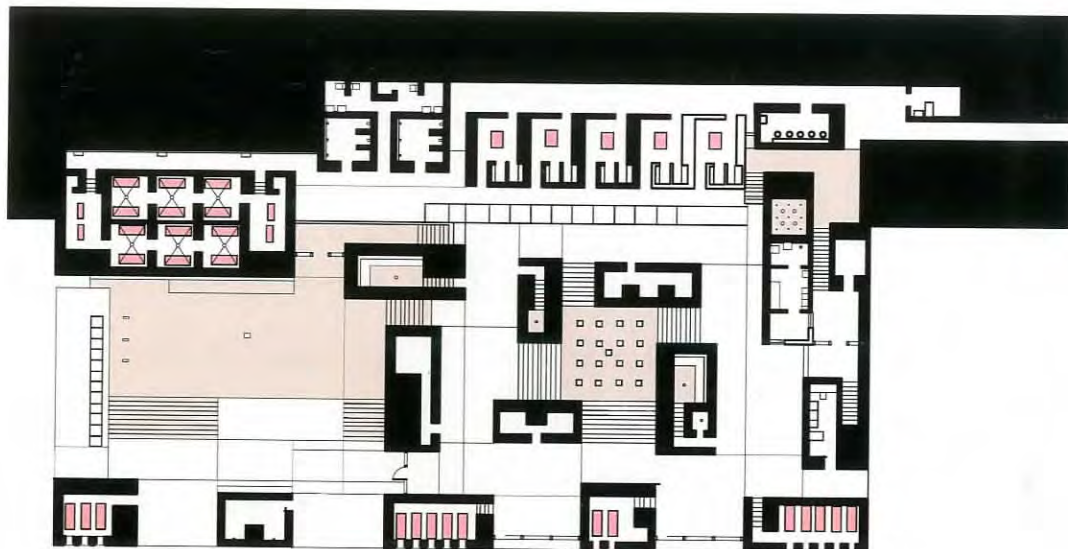


VALS THERME SPA

PETER ZUMTHOR

GRAUBUNDEN CANTON, SWITZERLAND

1996





Indoor pool 32° C
Outdoor pool winter 36° C
Outdoor pool summer 30° C
Fire pool 42° C
Ice pool 14° C
Flower pool 33° C
Sound Bath — 35° C
Sauna- 85–100%
Sounding Stone
Massage rooms
Relaxation rooms

VALS THERME SPA

LEFT: PLAN

RIGHT: SECTION

TEMPERATURE AND MINERAL BATH LOCATIONS

Typical spas concentrate on the relaxation of the body and muscles through deep tissue massages and qualified aromas; however some spas throughout the world concentrate on the medicinal mineral contents of the waters which are influenced from the natural qualities of hot springs. Balneotherapy is the most popular and natural approach to mineral water bathing and drinking. It is a healing that uses hot springs, water, gasses, mud and climatic factors such as heat. Different springs contain different minerals which have special therapeutic effects on the organs of the body, such as the heart, liver and skin. For instance, Ein Gedi's hot spring in Israel contains qualities of sulfurous, chloride and peloid waters.

Water has been used in holistic measures; some believe that water has the ability to cure diseases more so than modern medicine. Water causes the whole body to feel sedated. Temperatures play a role in this holistic healing; cold water rejuvenates, re-energizes and helps resist disease and pain. Ice water reduces the pain of minor burns and bruises. Controls bleeding. Warm (neutral) water relaxes and sedates the body. Hot Water soothes the body, induces perspiration increases. Steam opens pores, creates perspiration which in turn cleanses the body. Going from hot water to cold quickens circulation and bodily reaction.

20 Greenwood, Sarah. "Le Spa en Israël." *Interior Design Magazine*. 14 June 2007. Web. 2007. <http://www.idmagazine.com>

21 Huxley, Simon. *Hot Springs of the World*. London: World Scientific, 2007.



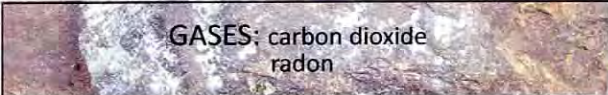
EIN GOKKEK

NATURAL MINERAL SPRING


EIN GEDI, TIBERIAS ISRAEL

FOUNDED IN BIBLICAL TIMES

BICARBONATE: Sodium Bicarbonate Calcium Bicarbonate	SULFAR & SULFATES
<p>Salt resulting from the incomplete neutralization of carbonic acid or the passing of excess carbon dioxide into a solution base.</p> <p>Natural component of blood and is essential for proper digestion, metabolism and overall functioning.</p> <p>Drinking- Biocarbonates stimulate the appetite and increase secretion of the gastric juices necessary for proper digestions.</p> <p>Bathing- 10- 20 minutes temperature of 86- 95 degrees F.</p> <p>Cures- Cardiovascular diseases, nervous exhaustion and autonomic nervous system imbalance.</p>	<p>Sulfur springs abound wherever there is volcanic activity, although they can be found in areas without volcanic activity. Contains a high aroma of hydrogen sulfide gas.</p> <p>Sulfur-rich waters help in assist in the formation of a variety of microorganisms, algae, bacteria that are cultured and therapeutically in the form of mud applications.</p> <p>Cures- Indigestion, kidney disorders and opens nasal passages and stimulates mucous membranes.</p> <p>Bathing- No specific time or temperature, more commonly used for drinking and breathing in the form of a fine mist through.</p>

 GASES; carbon dioxide radon	CHLORIDE
<p>Dioxide waters can be dangerous yet highly medicinal. Produced through the combustion, decomposition or fermentation of carbon or its compounds.</p> <p>Carbon Dioxide stimulates breathing and has positive effects on the heart. Also has the ability to help dilate the arteries and its helps increase peripheral blood circulation. Gas is extracted from the springs to be used as injections in 'bagging', which involved placing an airtight plastic bag and injecting it with dry Carbon Dioxide gas.</p> <p>Bathing- Cold waters rather than warm or hot. Starting with 5 minute 15% Carbon D. baths slowly increasing to 10 minutes and 20% Carbon D. and later to 40%.</p>	<p>Known as salt waters or muriated waters, saline springs are rich in sodium chloride, derived from deposits of salt or sandstone. Chloride helps regulate fluids both in and out of the body cells. Facilitates the digestion of food and body's absorption of nutrients.</p> <p>Drinking- Chloride is not meant to be drank.</p> <p>Bathing- (ideally .5- 3% sodium) at a temperature 93-104 degrees F for 10- 25 minutes.</p> <p>Cures- Hypotrophy, respiratory infections, enuresis.</p>

PELOIDS	RADON
<p>Peloid is the technical term for mud, pelotherapy. This helps remove toxins from the body and maintains heat in various parts of the body and aids absorption of minerals and other therapeutic and softens skin.</p> <p>Mud is made up of 2/3rds water and 1/3 solid.</p> <p>Bathing- Thermal peloid springs can be as hot as 152 degrees F. flora is found in its chemical composition adding to its chemical and therapeutic qualities. Man made baths should range from 100-115 degrees F for 20-40 minutes and washed off with warm water.</p> <p>Cures- complaints of rheumatic, vascular, skin and orthopedic disorders. rheumatic diseases, gout, neuralgia, dermatitis, gynecological problems and diabetes.</p>	<p>Radon- Radioactive inert gas that has a very short life normally found in soil, rock and water.</p> <p>Bathing- European spa's use small amounts of radon gas to treat a wide range of health problems. Recommended baths are 8-15 minutes in heated water ranging from 95-100 degrees F. Can also be used from inhaling humid air or steam contain radon.</p>

	CALCIUM	MAGNESIUM	POTASSIUM	LITHIUM
<p>Our blood depends on iron to nourish it with oxygen and promote the formation of red blood cells which are essential to our blood system. Usually iron springs are brownish in color. Used for both bathing and drinking.</p>	<p>Essential found in foods specifically dairy products such as milk, soy products, sea kelp, wheat germ and green vegetables. Help blood to clot and builds bone and teeth. Plays a role on normal liver function and helps muscles contract.</p>	<p>Reduces risk of heart diseases and regulates body functions as well as produces bones and teeth. Found primary in nuts, whole grains and green vegetables. This can be absorbed in hot baths as well as drinking rich magnesium mineral water.</p>	<p>Maintains normal blood pressure, found in mineral waters absorbed by drinking or hot baths.</p>	<p>Silvery-white alkali metal occurs in a variety of compounds. Poison when ingested yet lithium carbonate therapeutic qualities to cure manic depression via hot springs.</p>
<p>These are not highly concentrated minerals or oligomineral waters; lightly chemically compacted heated at temperatures over 95 degrees F. They help reduce stress, increase body temperature and general circulation.</p>				

‘Visions’ Fitness Center and Mineral Spa

Lobby/ Entrance

Security stations, checking member ship.

Public Program

Female and Male Changing Room.
Showers, lockers

Work out Spaces Equipment

Cardio- Treadmill, Elliptical
Weight Machines
Free Weights
Floor Mats

Classes

Club ‘Rave’
Kangoo
Kickboxing

Cycling
Hip Hop
Boxing

Wellness Center

Speak with consultants regarding life style changes or personal training as sistance consultation.

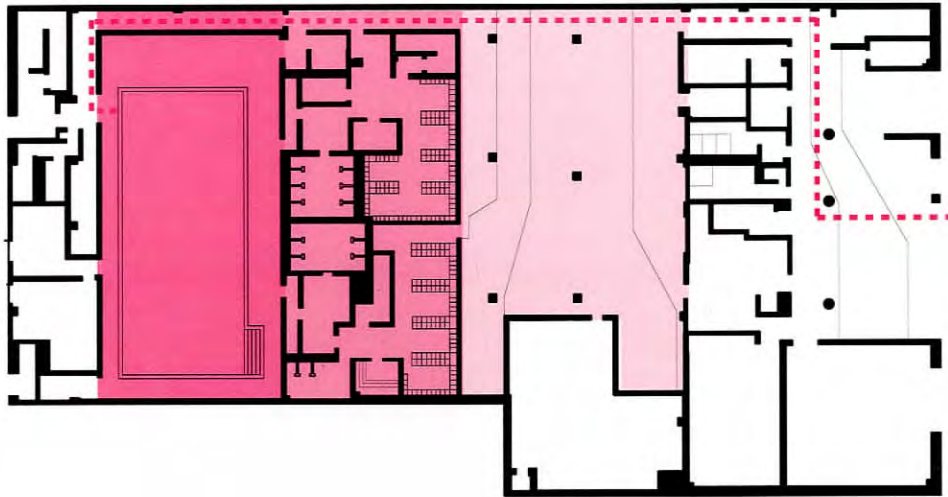
Oxygen Bar

Wellness Center

Speak with consultants regarding life style changes or personal training as sistance consultation.

Administration

Administration offices/ Conference
Lounge



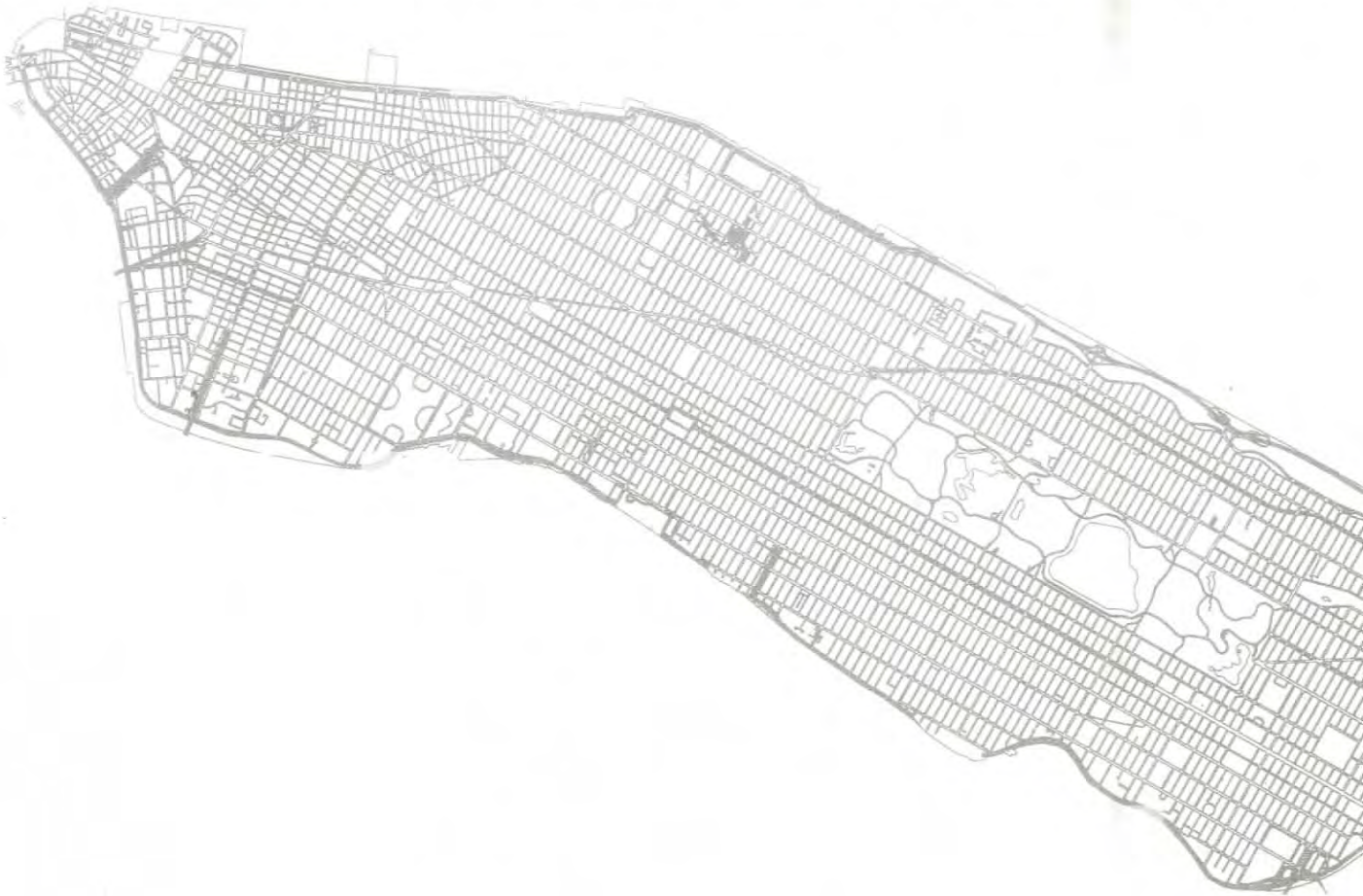
TYPICAL ONE FLOOR NYC FITNESS CENTER PLAN

BALLEYS

113 4TH AVENUE

2001

- Age: Twenty Five- Forty-Five
- Moderate--> + Income
- Accessible or within this criteria neighborhood
- Not sticky a residential neighborhood, traffic footprint necessary for advertising and profit reasons
- Near a water source for green conscious design in regards to the mineral spa. Although the water will be filtered and chemically altered it is important if available, to use the natural surroundings of the site, specifically where water is a large component.
- Preferably owner verses renter neighborhood to maintain membership
- Transportation accessibility via subway
- Non- Touristy neighborhood
- Not located too close to any large chain (example: Equinox) fitness center.
- Preferably not near a private/local neighborhood fitness center.

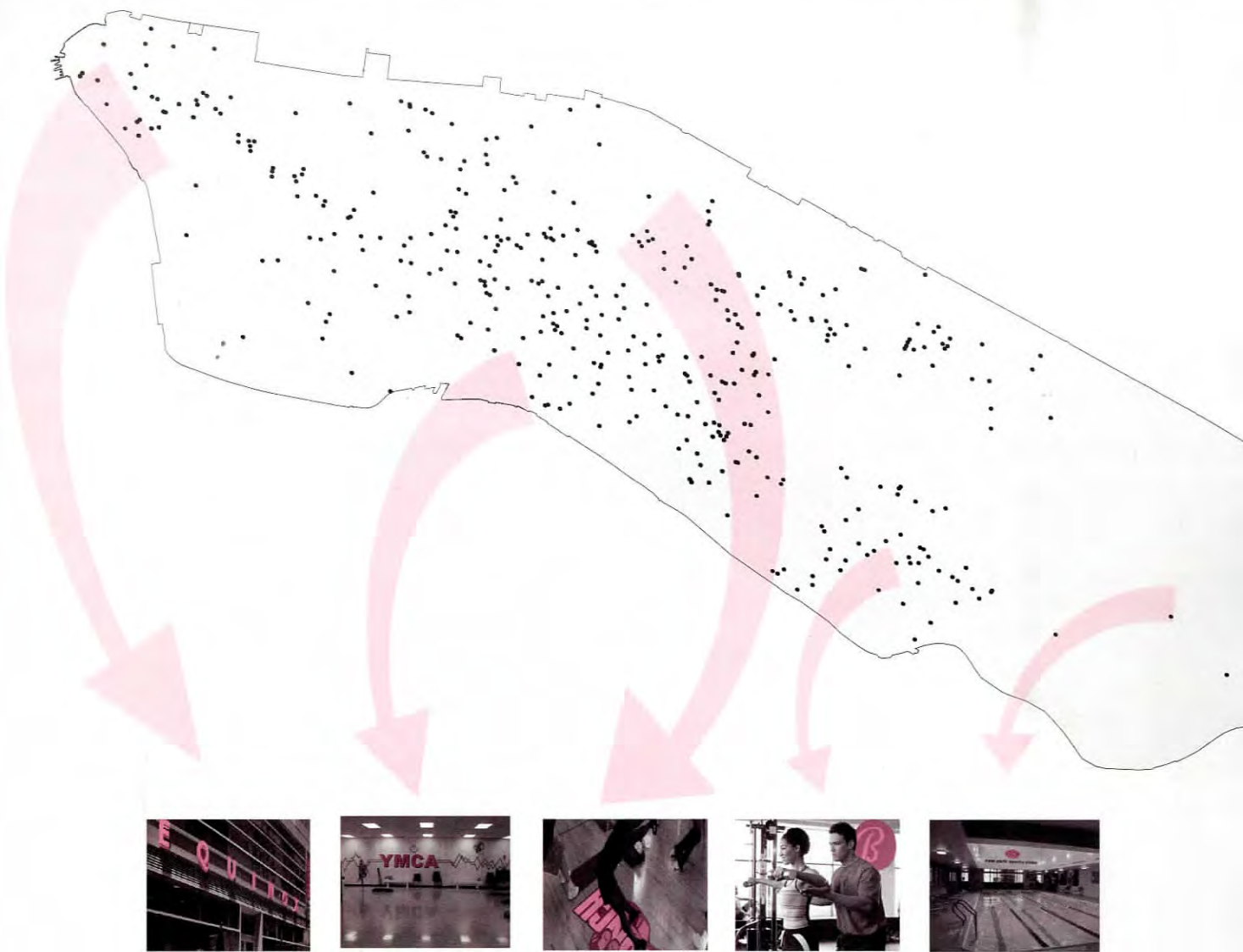


PLAN OF MANHATTAN

MANHATTAN

NEW YORK CITY

2009





- | | |
|-----------------------|-------------------------|
| ● FITNESS CENTER | ● CRUNCH FITNESS CENTER |
| ● EQUINOX GYM FITNESS | ● BALLEYS FITNESS |
| ● YMCA FITNESS CENTER | ● NEW YORK SPORTS CLUB |

PLAN OF MANHATTAN

MANHATTAN

NEW YORK CITY

2009

- | | | | |
|----|-------------------|----|----------------------------------|
| 1 | SOUTHERN TIP | 16 | KIPS BAY |
| 2 | WALL STREET | 17 | CHELSEA |
| 3 | WHITE HALL | 18 | MURRAY HILL |
| 4 | TWO BRIDGES | 19 | TUDOR, BEEKMAN & SUTTON |
| 5 | ABC CITY | 20 | GARMENT DISTRICT & HELLS KITCHEN |
| 6 | LOWER EAST SIDE | 21 | MIDTOWN |
| 7 | TRIBECA | 22 | TURTLE BAY |
| 8 | LITTLE ITALY | 23 | MID-TOWN WEST |
| 9 | SOHO | 24 | LINCOLN SQUARE (WEST SIDE) |
| 10 | EAST VILLAGE | 25 | UPPER EAST SIDE |
| 11 | STUYVESANT | 26 | CENTRAL PARK |
| 12 | GREENWICH VILLAGE | 27 | UPPER WEST SIDE |
| 13 | WEST VILLAGE | 28 | EAST HARLEM |
| 14 | GRAMERCY PARK | 29 | MORNINGSIDE HEIGHTS |
| 15 | MIDTOWN SOUTH | 30 | WEST HARLEM |



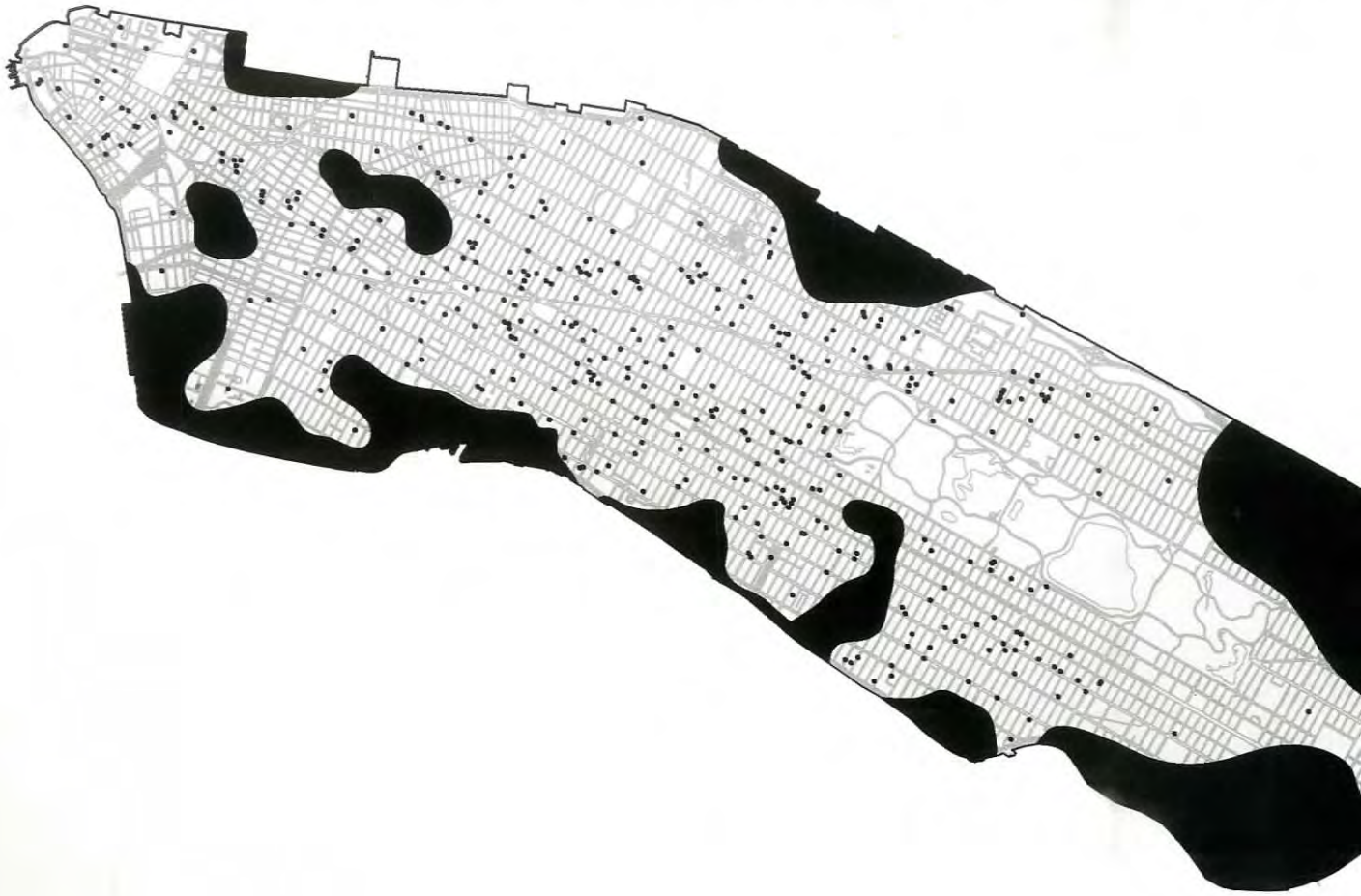
PLAN OF MANHATTAN

MANHATTAN

NEW YORK CITY

2009

5	ABC CITY	I- 46,985	19	BEEKMAN/ SUTTON	I- 88,371
		H- 30,561			H- 60,923
6	LOWER EAST SIDE	I- 27,625	23	MID-TOWN WEST	I- 69,219
		H- 33,193			H- 24,727
9	SOHO	I- 48,004	24	LINCOLN	I- 88,557
		H- 12,166			H- 40,014
12	GREENWICH VILLAGE	I- 73,978	25	UPPER EAST SIDE (LENOX HILL, YORKVILLE)	I- 78,301
		H- 30,263			H- 31,144
10	EAST VILLAGE	I- 69,475	28	EAST HARLEM	I- 28,955
		H- 13,843			H- 33,201
18	MURRAY	I- 77,889	30	WEST HARLEM	I- 29,116
		H- 32,144			H- 14,450



PLAN OF MANHATTAN

MANHATTAN

NEW YORK CITY

2009



MIDTOWN WEST

MANHATTAN

NEW YORK CITY

2009



123

SITE: MID-TOWN WEST/ LINCOLN CENTER (54TH-61ST, 9TH-12TH AVENUE)

"To make visible how the world touches us".

•

- Paul Cezanne²²

6

Hyper-imagery and constant distractions in contemporary culture, induced by technology has made us dependent on the visual sense, ultimately leading to the dismissal of the “other senses,” touch, sound, smell and taste.

By investigating the case studies of Decosterd & Rahm, one can begin to understand their ultimate goal of recognizing the invisible nurtured through technology. These architects go above and beyond traditional phenomenologists, by incorporating chemical and electromagnetic realms as well as meteorological conditions. However, their architecture like traditional phenomenologists is still reliant on bodily acknowledgement of the invisible.

In order to make traditional phenomenological approach more comprehensive, we must juxtapose vision with one other sense. Exhibitions like “Feedback Space” and “Hypo-surface Wall” use technology to contrast vision with touch and vision with sound, where exhibitions like “Pesce for Lunch” and the “Nature Matching System” use association to contrast vision with smell and vision with taste. However, these projects are just exhibitions and not occupiable programmed buildings.

Within a Fitness center and Mineral spa our senses are intensified. When designing these spaces where the senses will be graphically projected through technological means will al-

the client will be left alone with this mineral in a private space ultimately creating a multi-sensory experience while conditioning his/her body. These are only three examples of how the senses can be projected visually within the space, ultimately enhancing experience.

In order to alter phenomenological design we must make it more visually lucid, since that's what our society demands. So placing vision in the hand with one sense will allow phenomenological design specifically within in the space, specifically a Fitness Center and Mineral Spa, to be less experimental, ultimately enhancing an architectural experience and design approach.

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Balneotherapy- immersions into mineral waters; natural healthy approach to healing that uses hot springs, water, gases, mud and climatic factors such as heat.

Caldarium- a room with hot plunge bath waters used in a Roman bath complex.

Dismissed Senses- touch, sound, smell and taste.

Espa- meaning fountain in the Wallon language was a resort at the spring Espa. This became so popular that the world known in English spa remains became the common designation for health resorts around the world.

Fangothrapy- using thermal clay for medicinal purposes.

Ferruginous- technical term for an iron springs.

Frigidarium- large cold water/ pool found in a Roman bath complex.

Hammon- warm springs.

Healthing springs- spring of varying temperature containing minerals gases and vapors likely to bring out specific therapeutic effects on the human body.

Hydrotherapy- involves the use of water for pain-relief and treating illness. The term hydrotherapy itself is synonymous with the term water cure.

Hypocaust- underground floor heating.

Kuahausu- Japanese traditional hot spring (derived from the German term kurhaus).

Lightly mineralized- terms used when springs do not contain strong concentrations of minerals also known as oligomineral.

PH level- healing springs are classified by the ph level, classified under alkaline (above 8.5) Neutral 7 and acid under 3.

Mineral Bath- springs are also known as geothermal waters and are often used for therapeutic treatments, as well as for revitalizing and relaxing the mind and body. The three components in mineral baths that are used therapeutically are the temperature of the water, dissolved minerals and gases in the water, and mud.

Oligomineral- reference lightly mineralized.

Oxygen Bar- flavors in an oxygen bar come from bubbling oxygen through bottles containing aromatic solutions before

it reaches the nostrils: most bars use food-grade particles to produce the scent, but some bars use aroma oils.

Oxygen Therapy- general term used to describe the administration of supplemental oxygen to increase oxygenation of body tissue; however, it is often used to describe ozone therapy or the administration of small amounts of medicinal-grade hydrogen peroxide as intravenous drip or added to bathwater.

Ozone Therapy- involves the use of mixing a small amount of therapeutic ozone and oxygen with the patient's blood, which is then re-infused into the patient. It has been used to treat a wide variety of diseases, including cancer, high blood pressure, HIV infection and diabetes.

Peloid- technical term for mud

Pelotherapy- using thermal mud for medicinal purposes (similar to Fangotherapy).

Phlegm baths- in Japan these baths are accomplished by bathing in the warm sulfur springs and breathing in the vapors for a prescribed amount of time.

PH level- healing springs are classified by the ph level, classified under alkaline (above 8.5) Neutral 7 and acid under 3.

Salt water- muriated waters also known as saline springs.

Sauna- usually a cedar-lined room where dry heat from is administered from 160-210 degrees Fahrenheit. Like the steam bath, a sauna increases body temperature, leading to increased circulation and elimination of toxins.

Spa- Origins to a mountain town of that name near Liege in southeastern Belgium. Here, an iron rich spring was used by an ironmaster in the fourteens century to cure his rheumatism. He founded a health resort at the spring called Espa.

Steam bath- takes place in a room lined with ceramic tiles and heated with steam at temperatures of 110-160 degrees Fahrenheit. The steam may or may not contain mineral water vapors and is often better tolerated than a sauna. Like thermal bathing, steam baths increase blood circulation, raise body temperatures and aid in body cleansing.

Technology- a mechanism to help express the invisible.

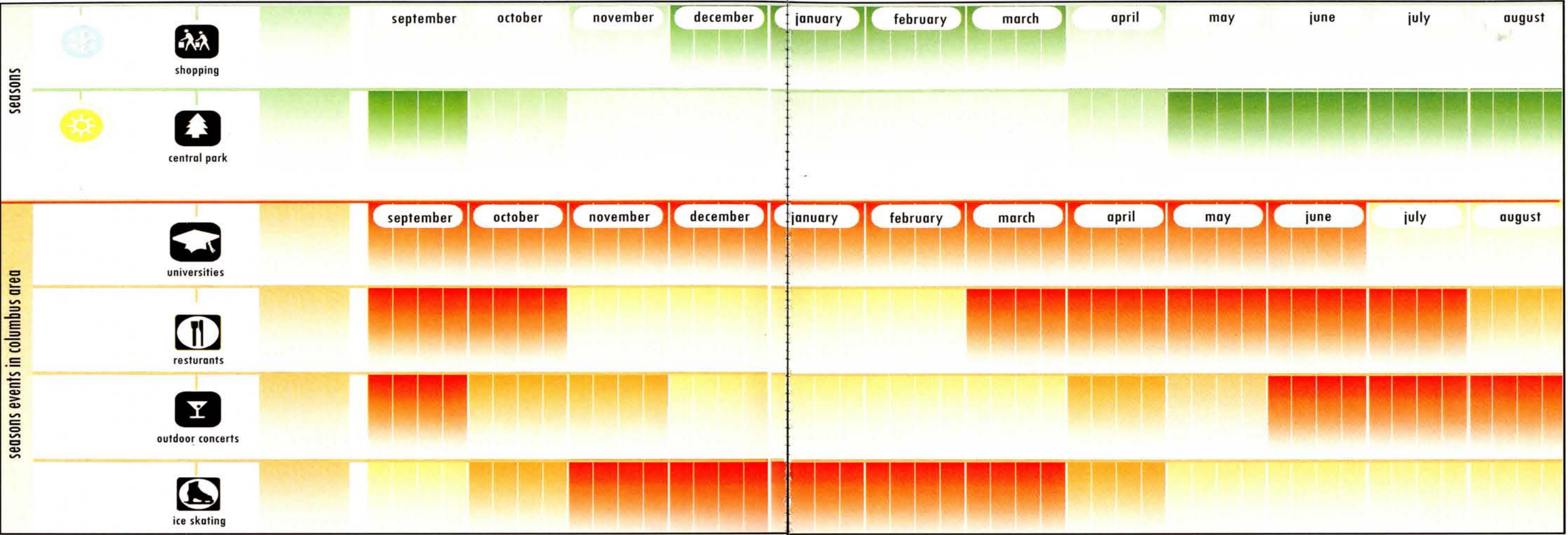
Tepidarium- warm bath waters of Roman Bathrooms heated by the Hypocaust.

Thermae- the term for baths in Ancient Rome.

The relationship of architecture to the context beyond its surface perimeter is one of confronting an omnipresent materiality that not only engulfs the building but permeates it as well".

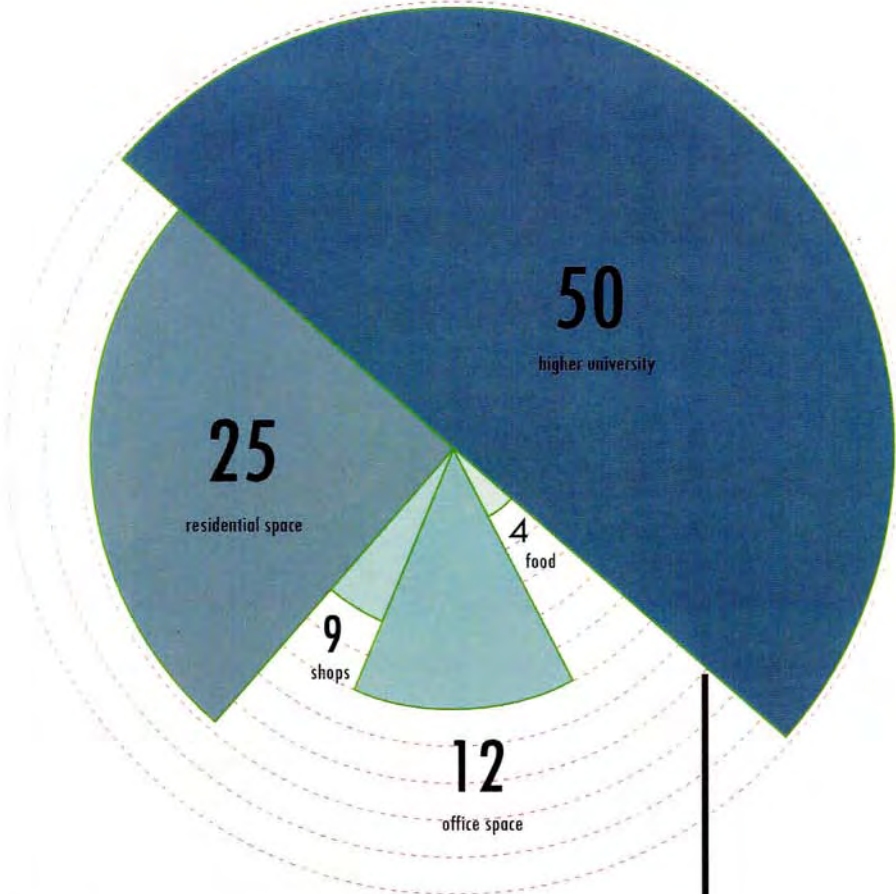
- Sean Lally¹

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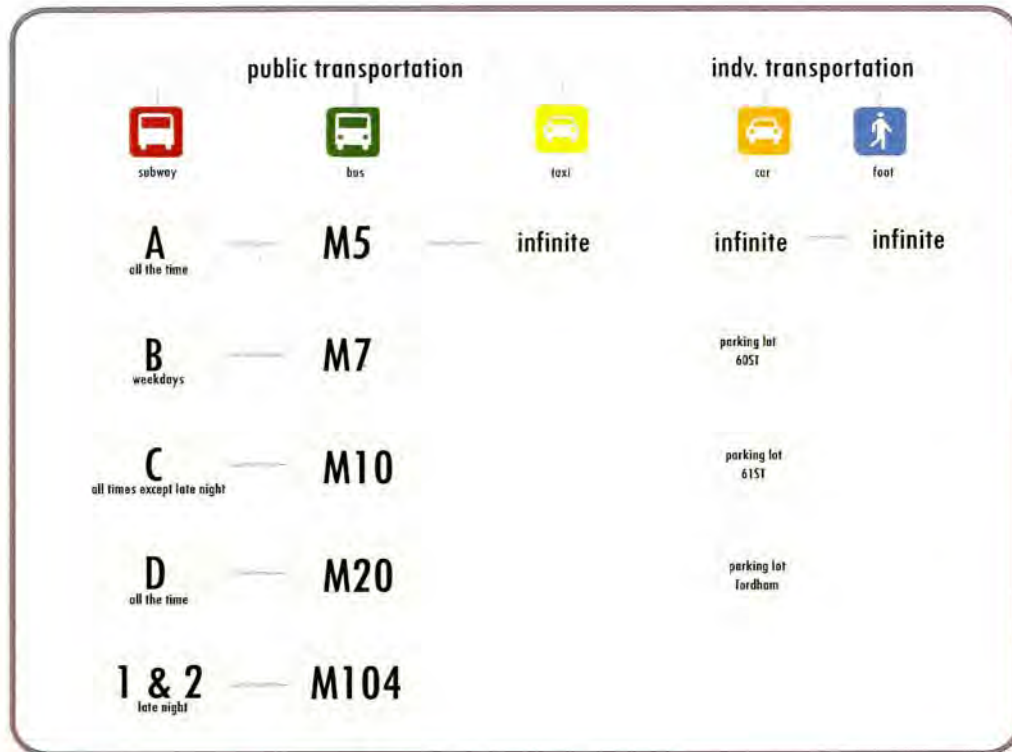
IN BETWEEN 60TH & 61ST, BROADWAY & COLUMBUS AVENUE

CALENDAR OF THE AREA



makeup of street in %

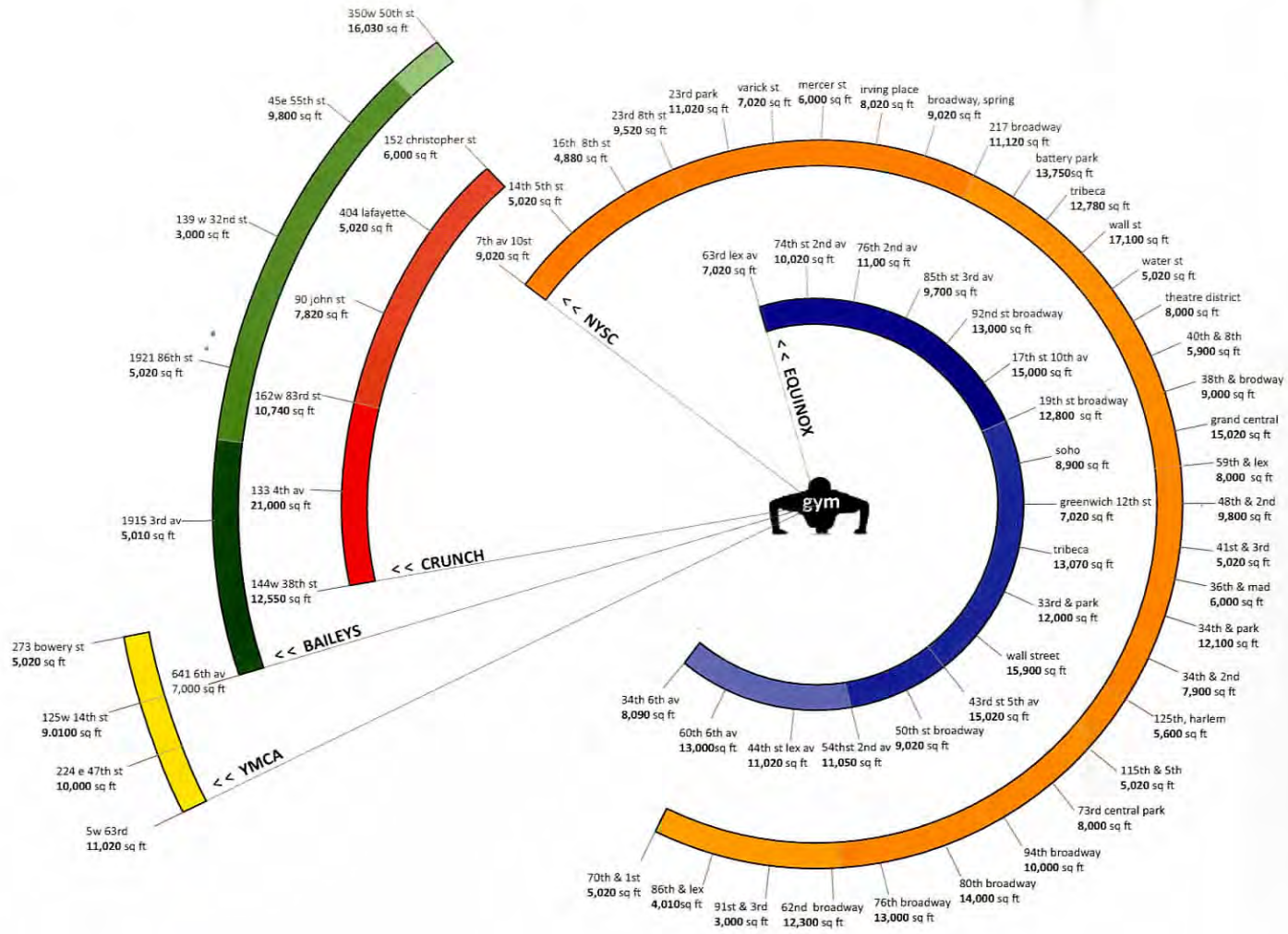




IN BETWEEN 60TH & 61ST_ BROADWAY & COLUMBUS AVENUE

LEFT SITE MAKEUP

RIGHT TRANSPORTATION



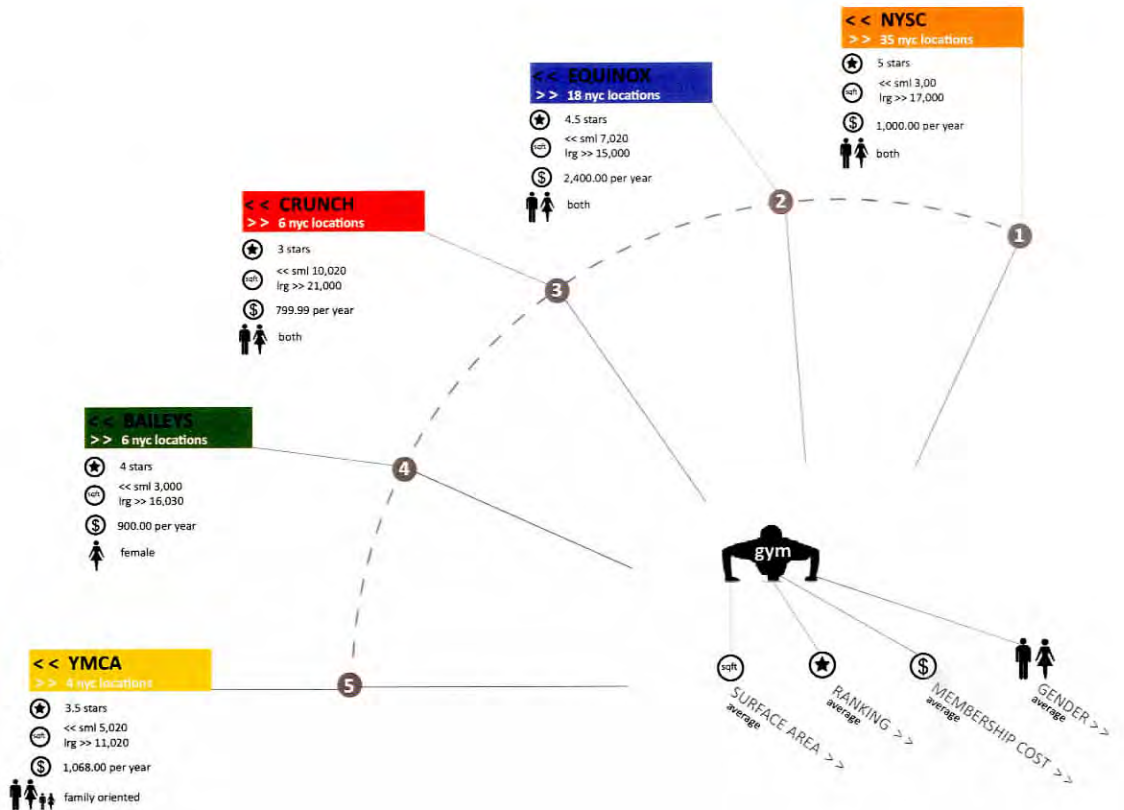
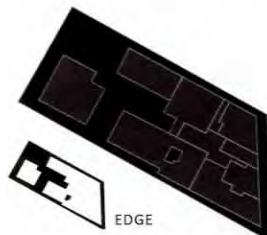
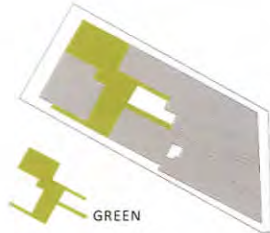
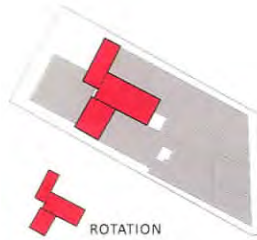
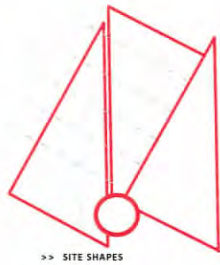
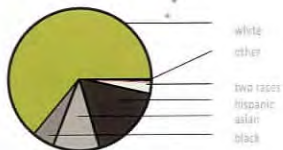
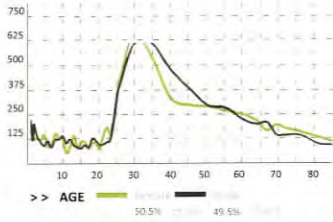


DIAGRAM: GYM ANALYSIS

LEFT: CHAIN GYM SQ. FOOTAGE

RIGHT:GYM SUMMARY





>> GREEN SPACES AND COURT YARDS

- green space
- court yard
- buildings



>> EDGE CONDITION AFFECTS

- my site
- greenedge
- city block
- dependent building

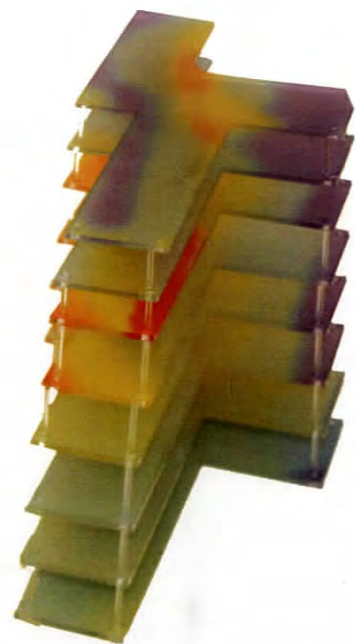
IN BETWEEN 60TH & 61ST_ BROADWAY & COLUMBUS AVENUE

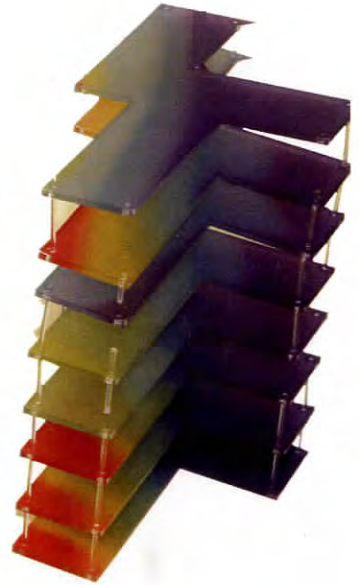
LEFT: SITE MAP

RIGHT: SITE ANALYSIS





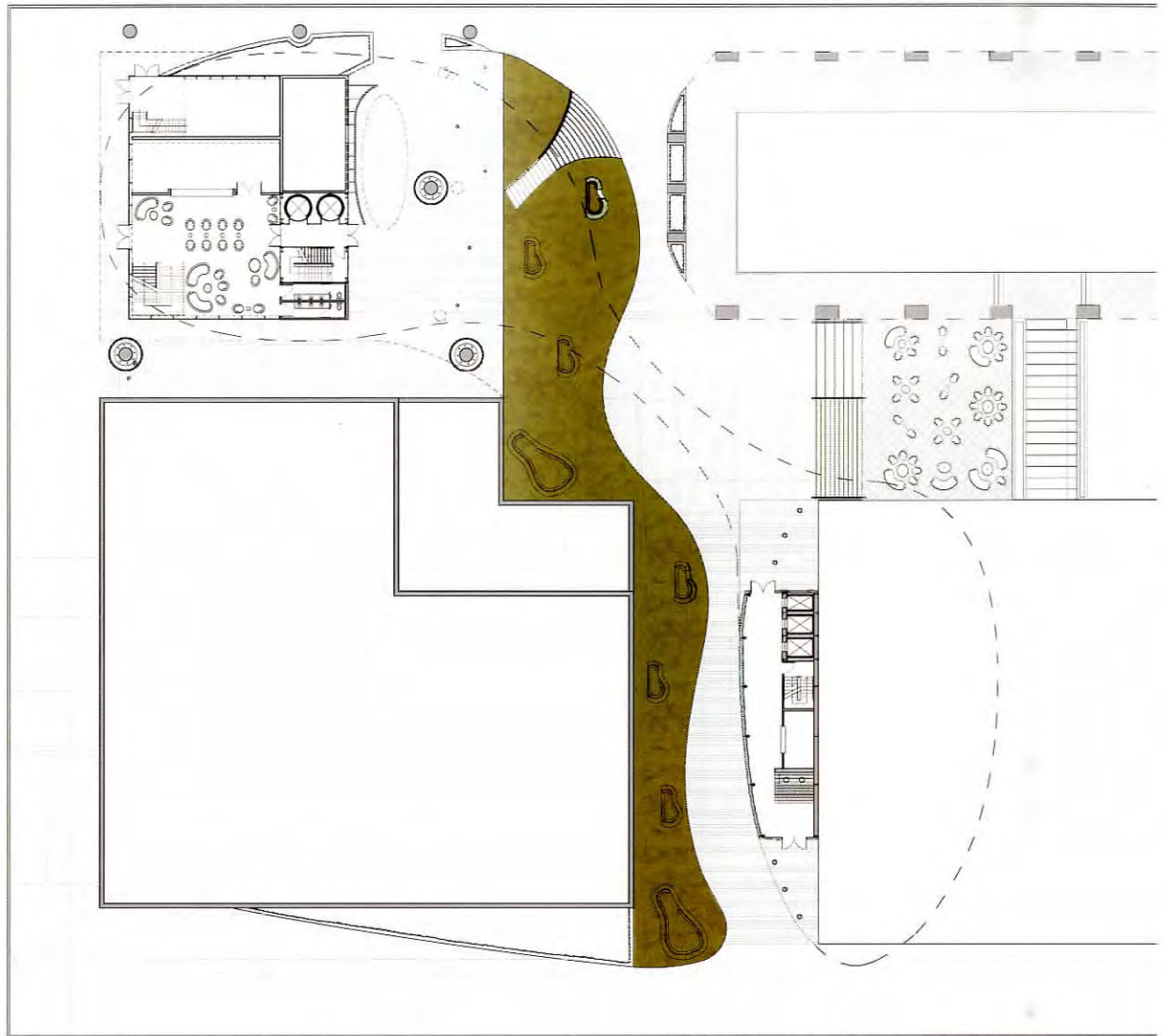




SUN STUDIES

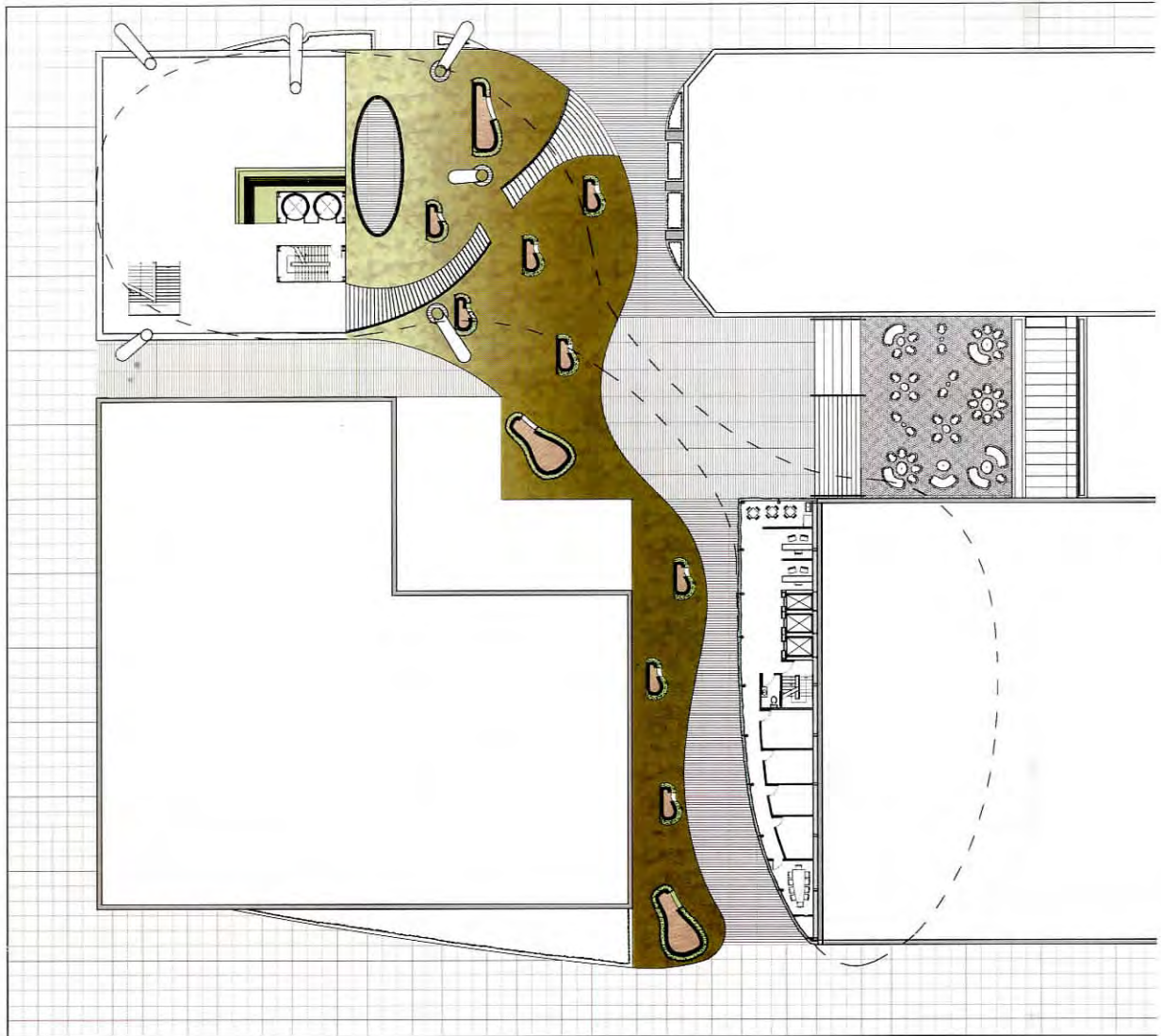
LEFT: SUMMER

RIGHT: WINTER



Lower Ground Floor Plan

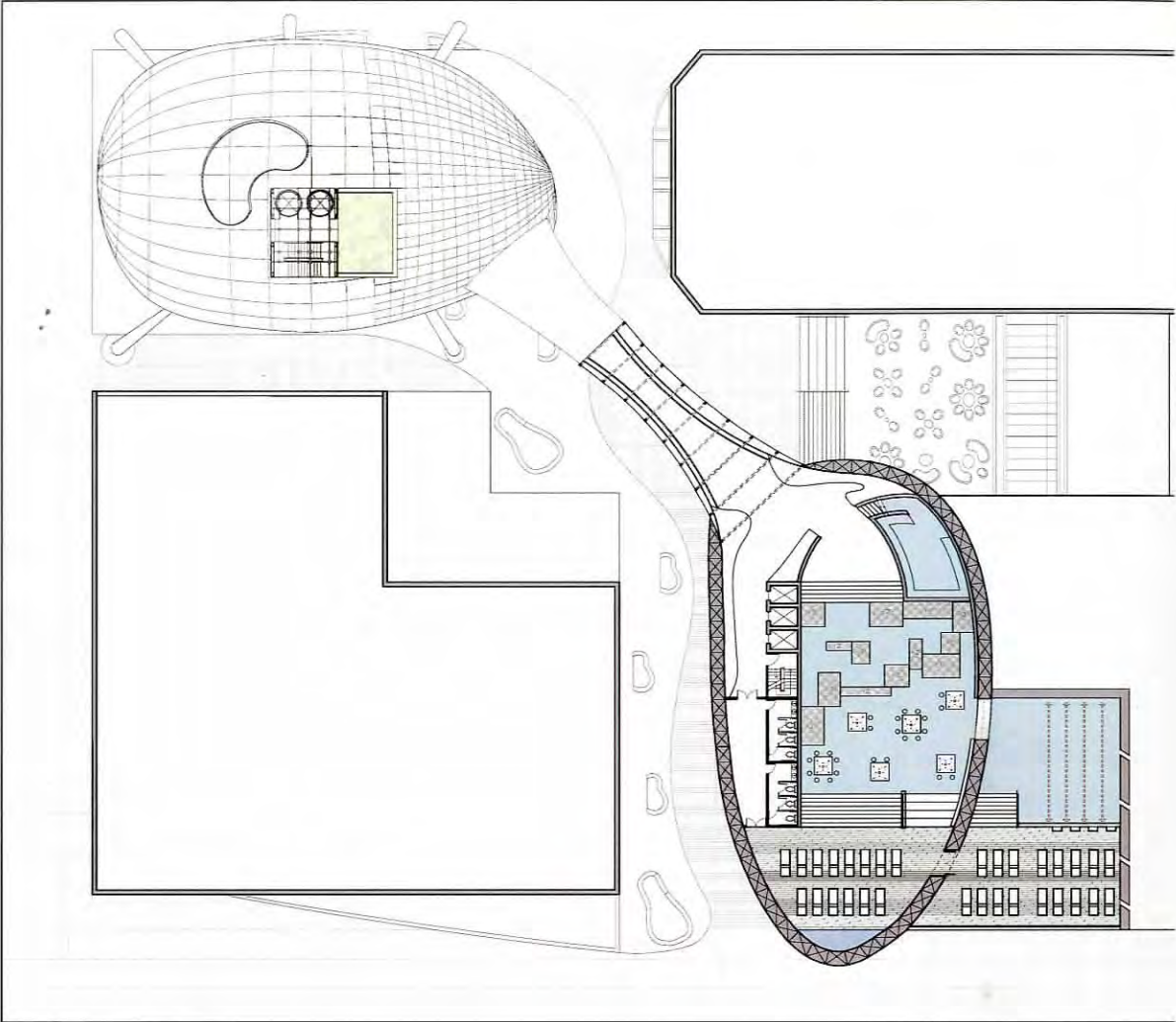
SCALE 1/8" = 1'-0"



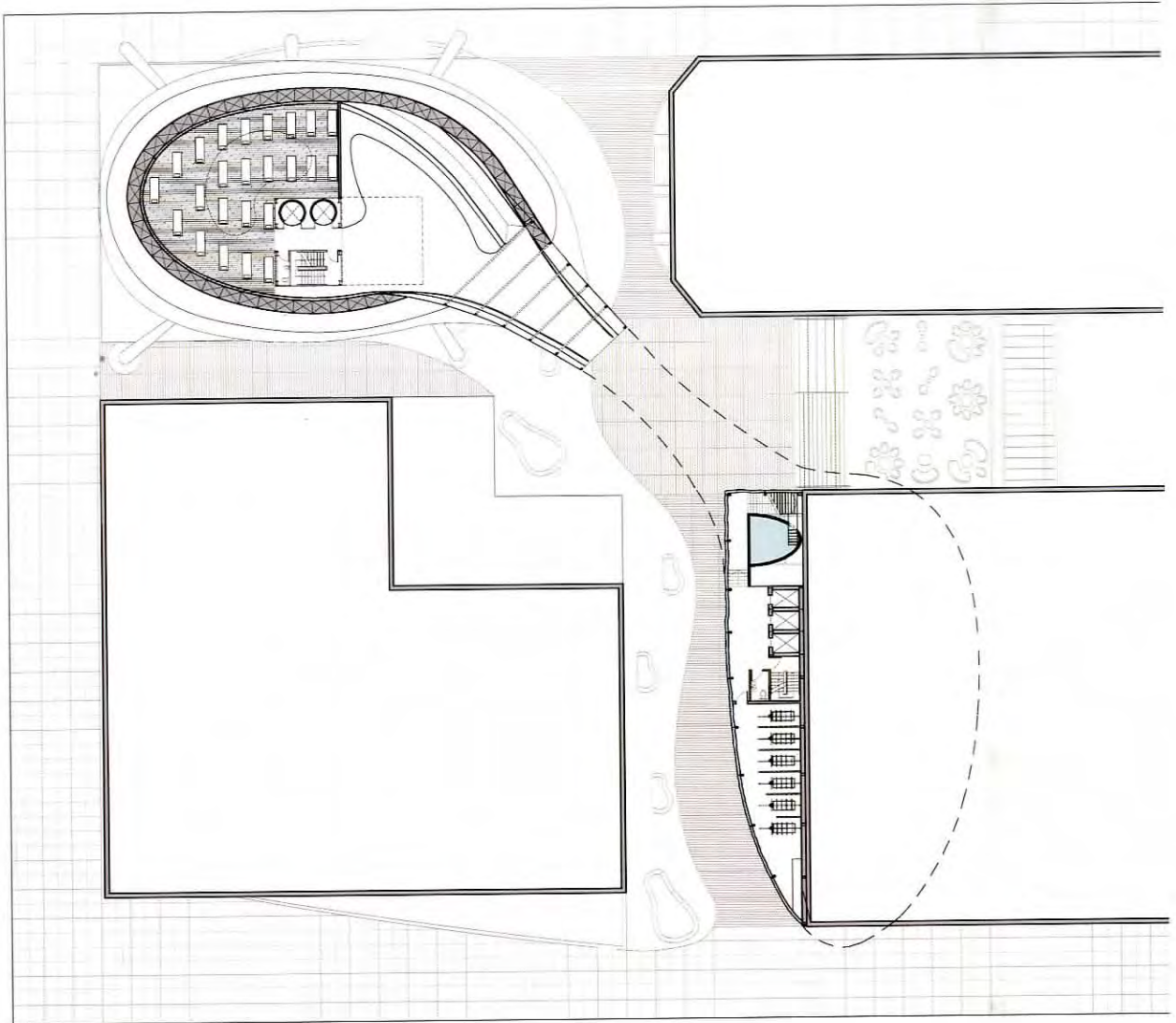
Upper Ground Floor Plan

Scale: 1/8" = 1'-0"

IN BETWEEN 60TH & 61ST_BROADWAY & COLUMBUS AVENUE



Floor Ten
Mineral Spa: Thermal Pools
Fitness Center: Public Green Roof
© 2015, 10/10/15

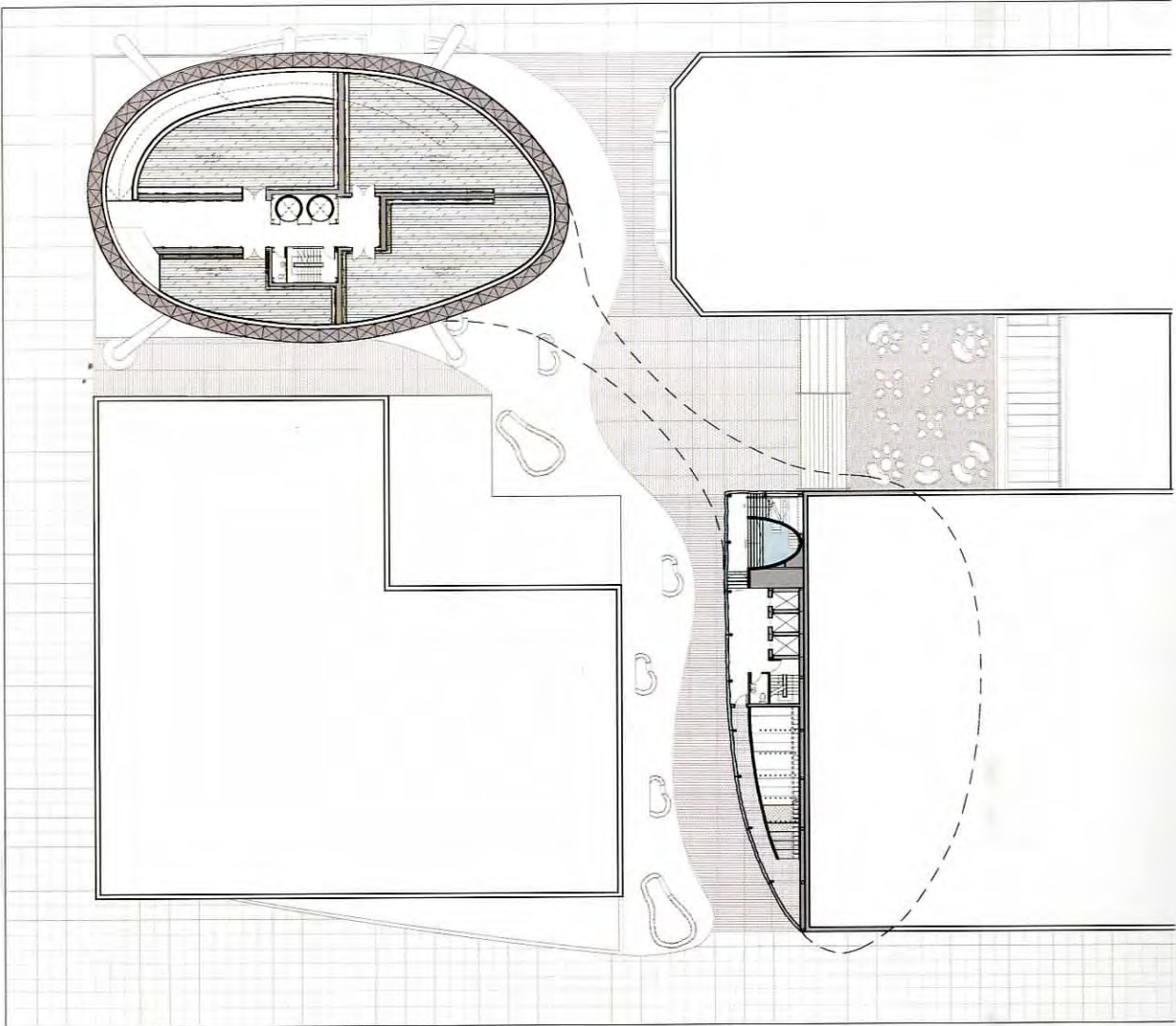


Floor Nine

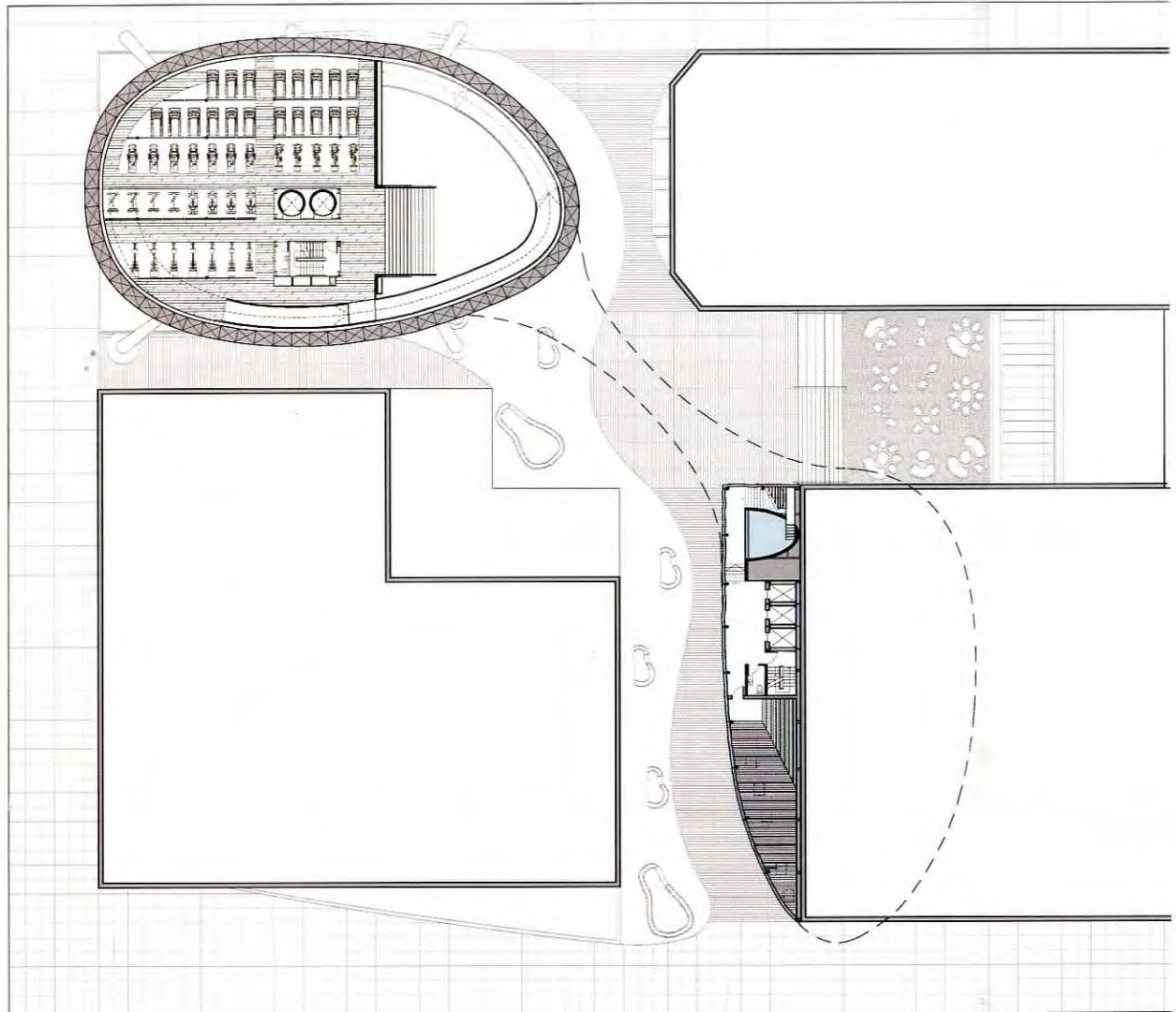
Mineral Spa: Hydrotherapy
Fitness Center: Yoga Studio

SCALE: 1/8" = 1'-0"

IN BETWEEN 60TH & 61ST_ BROADWAY & COLUMBUS AVENUE



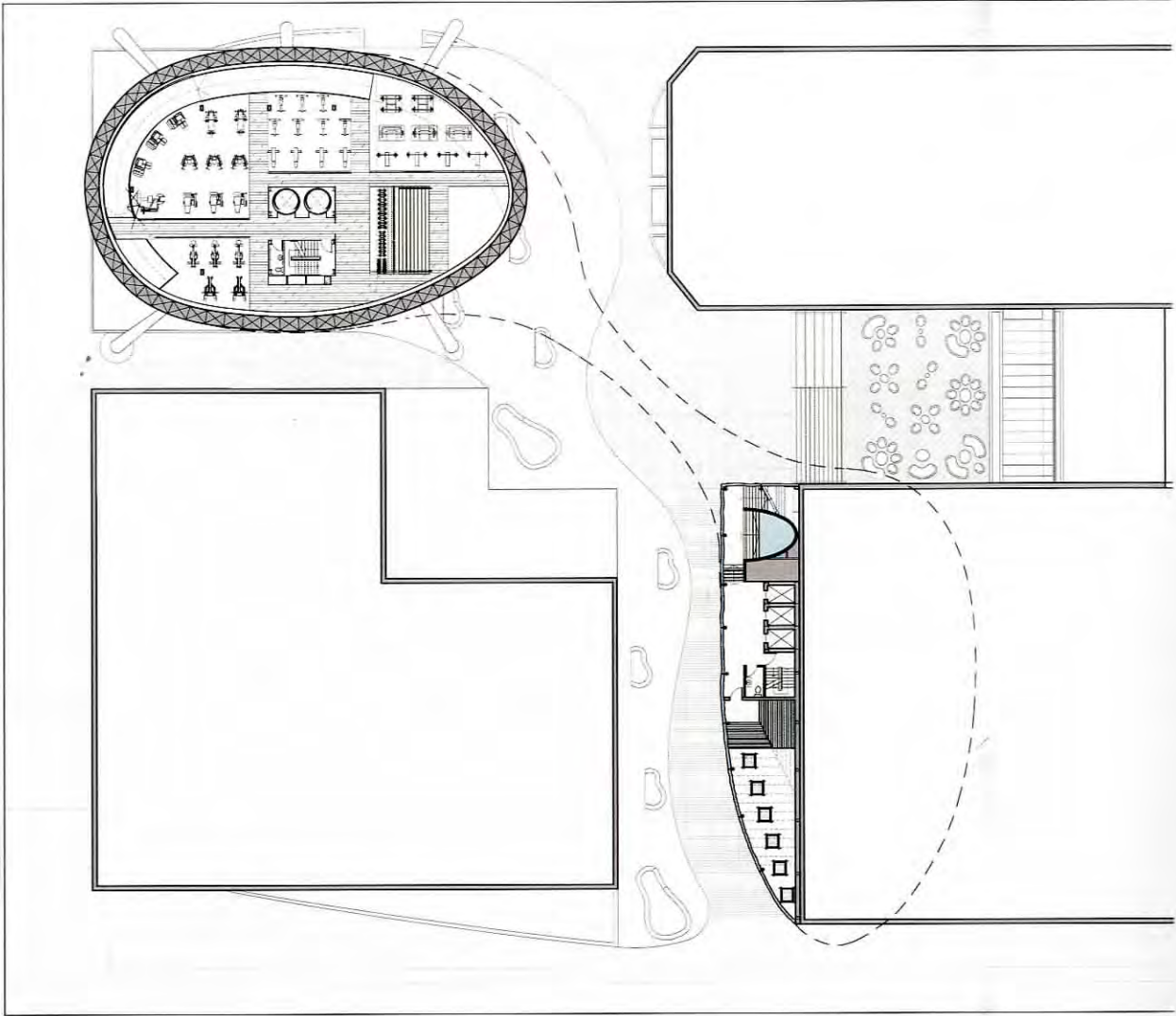
Floor Eight
Mineral Spa: Steam Room
Fitness Center: Green Studios
SCALE: 1/8" = 1'-0"



Floor Seven

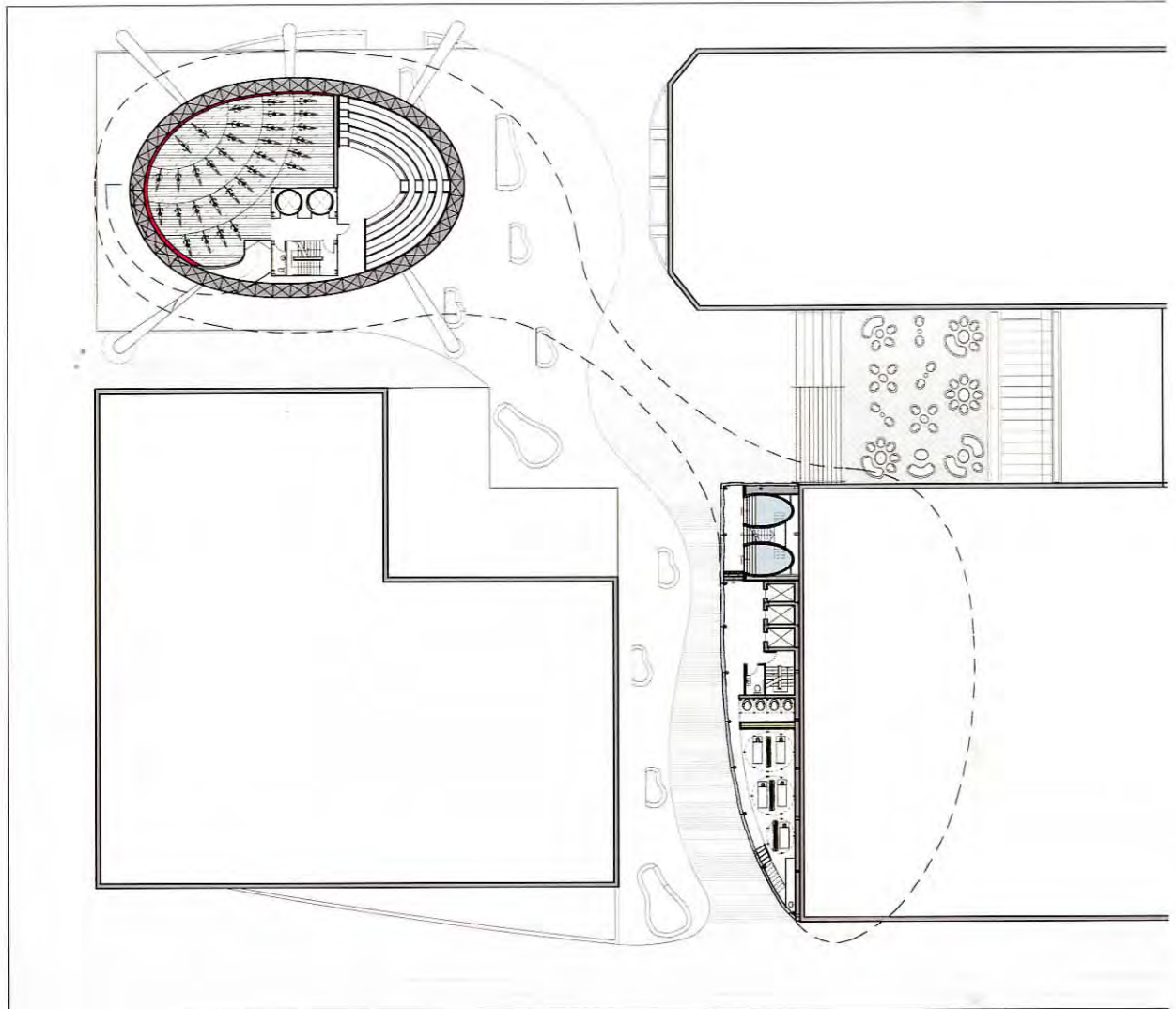
Mineral Spa: Sauna
Fitness Center: Cardio

SCALE: 1/8" = 1'-0"



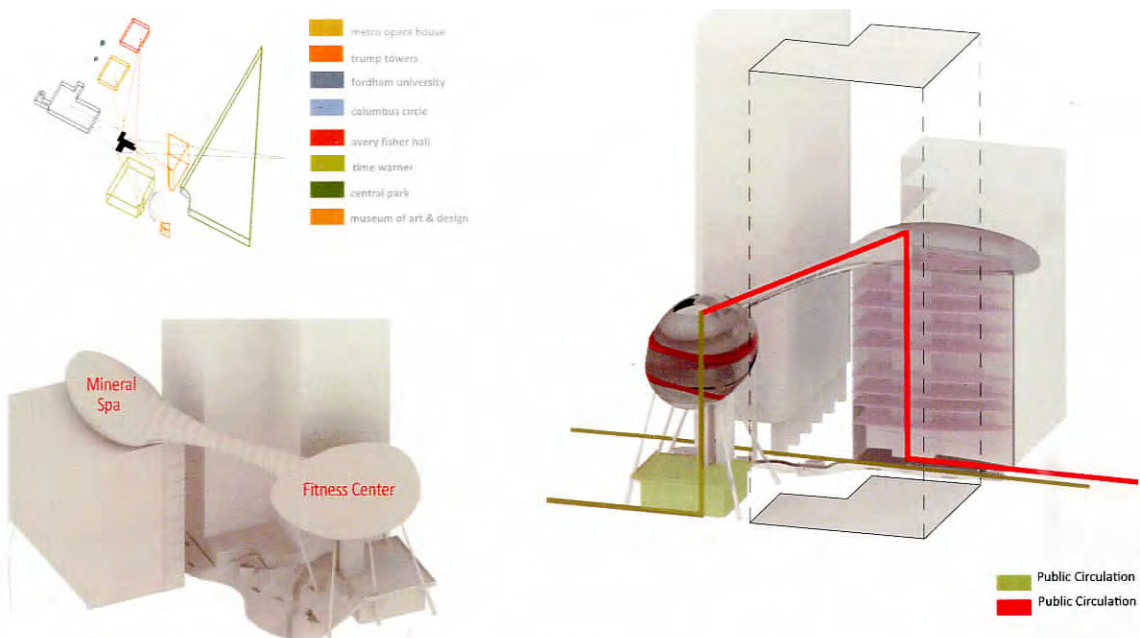
Floor Six

Mineral Spa: Sauna
Fitness Center: Thermograph Weight
SCALE: 1/8" = 1'-0"

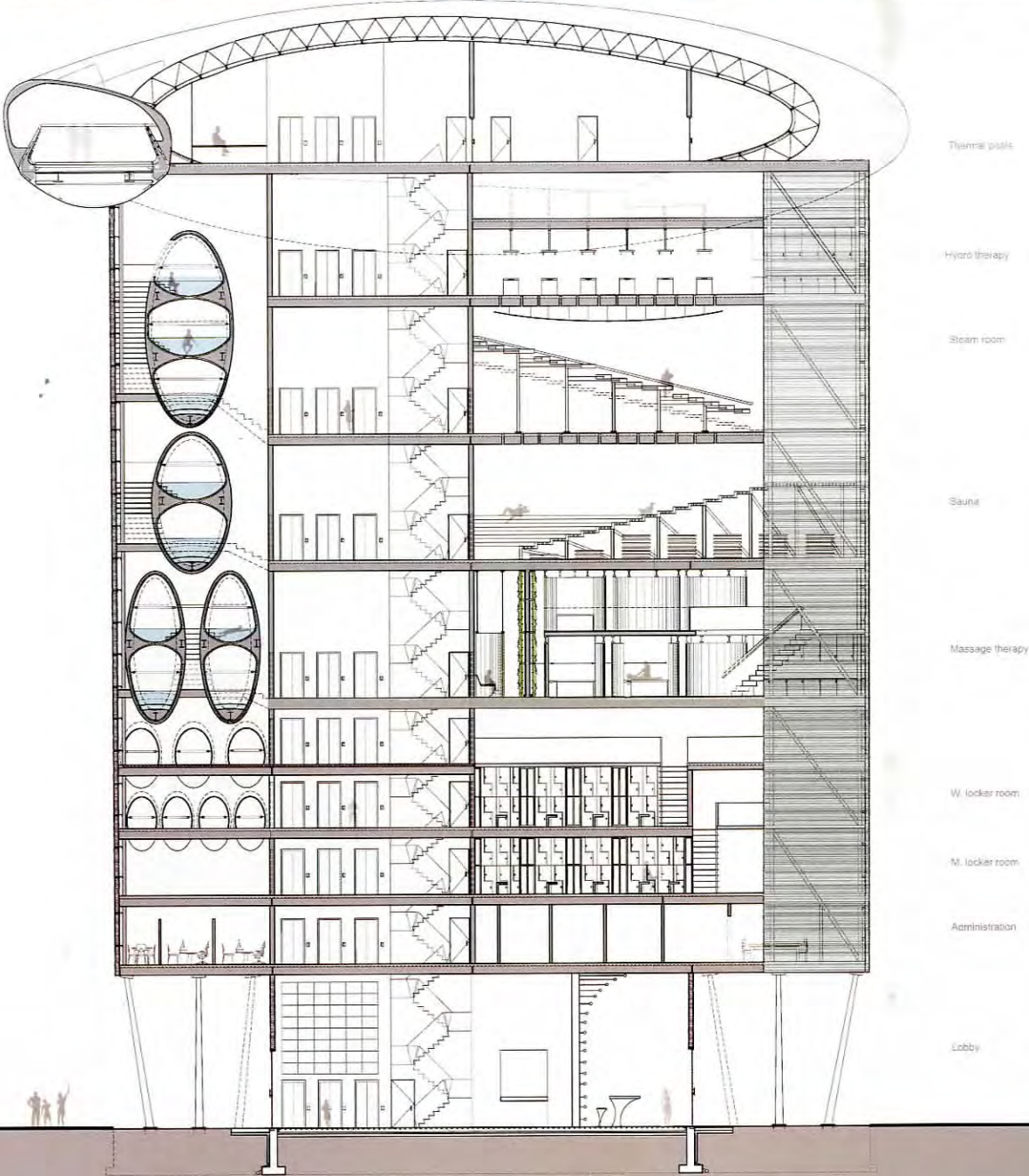


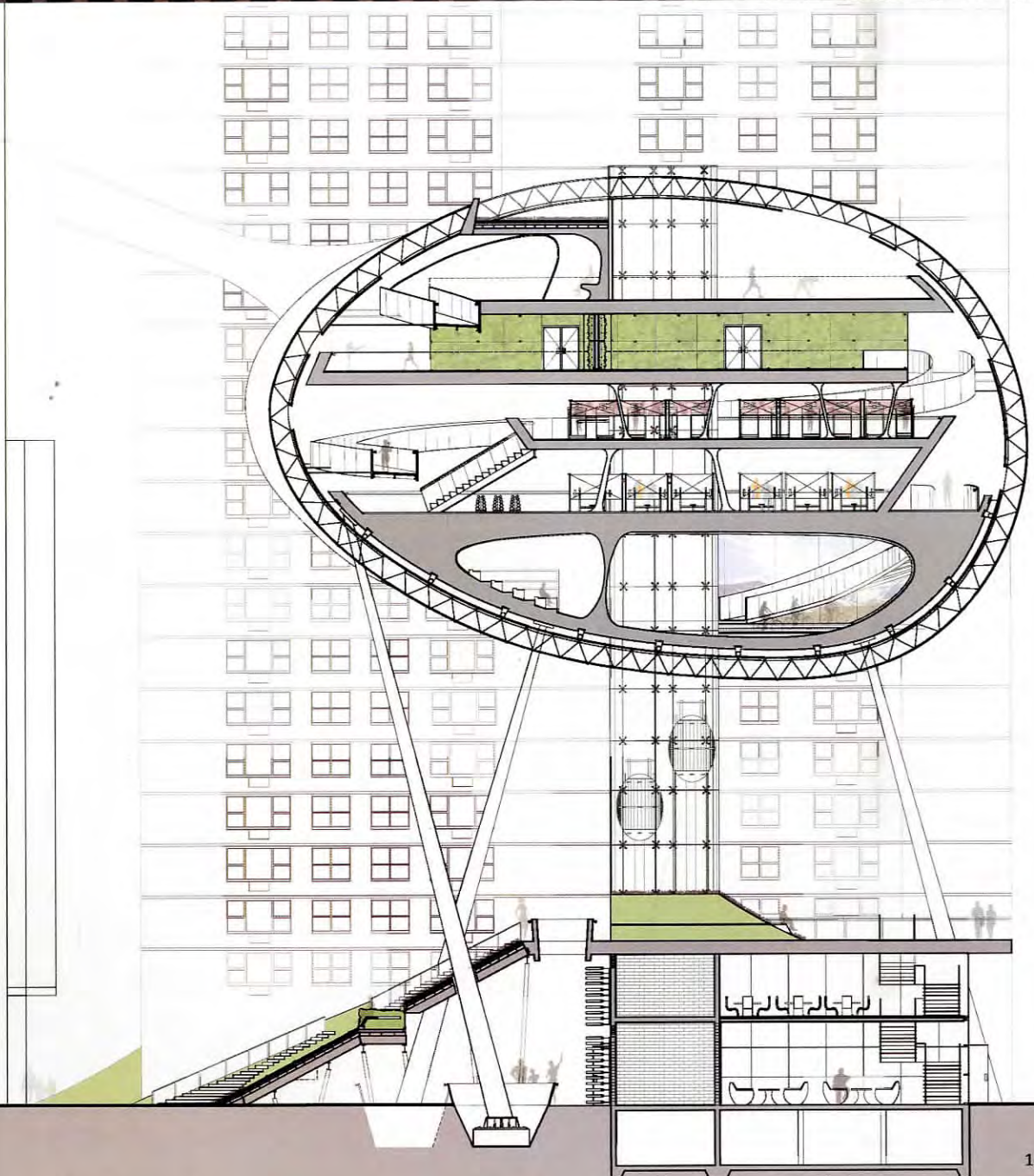
Floor Five

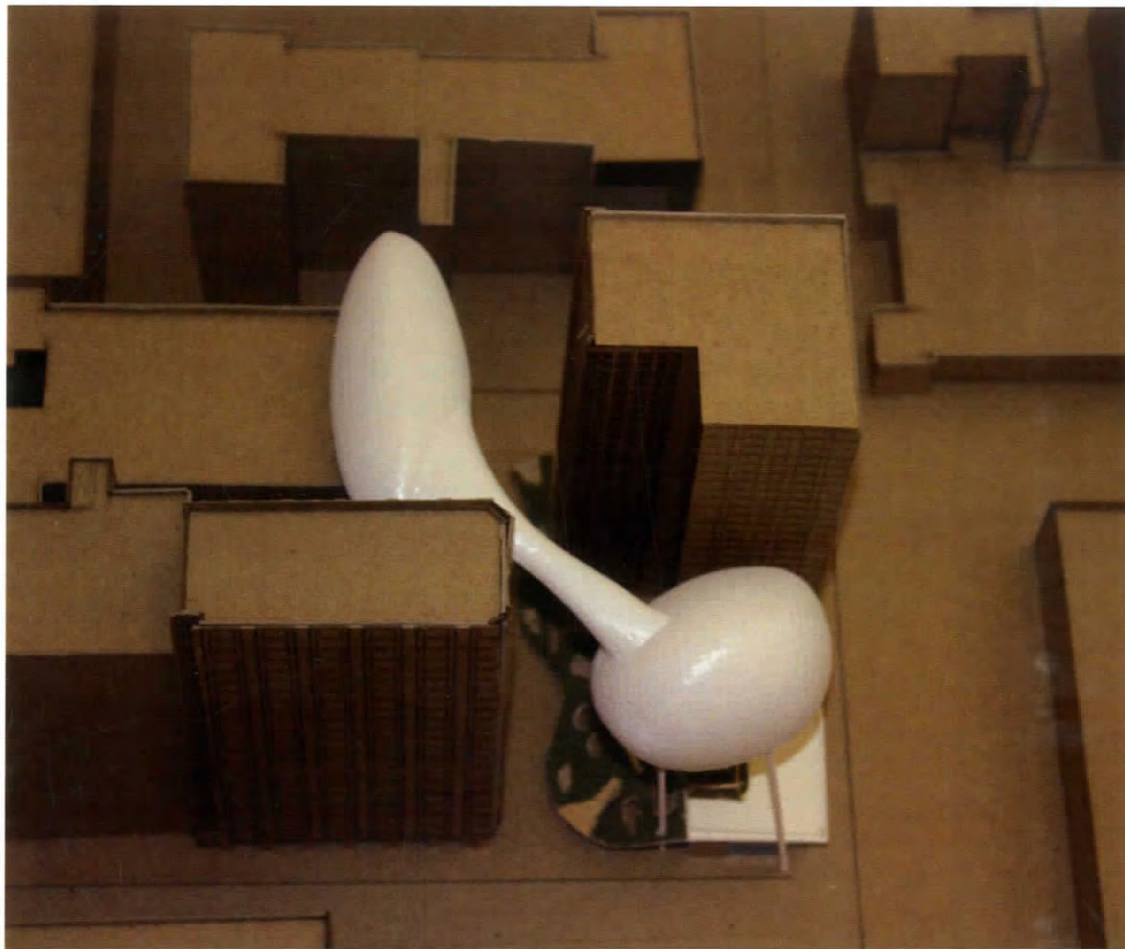
Mineral Spa: Massage Therapy
Fitness Center: Spinning Classroom & Lecture Hall
SCALE: 1/8" = 1'-0"



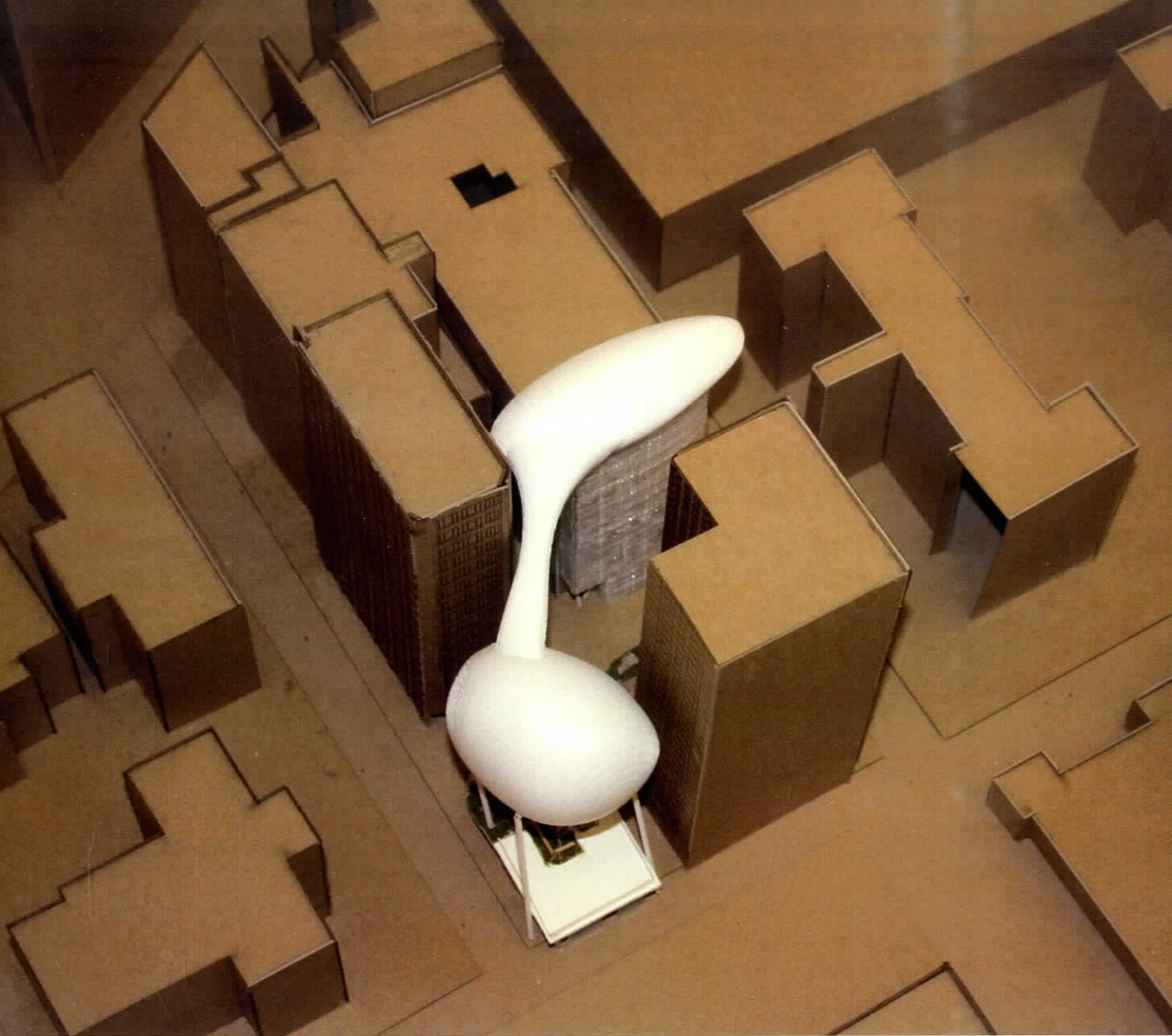


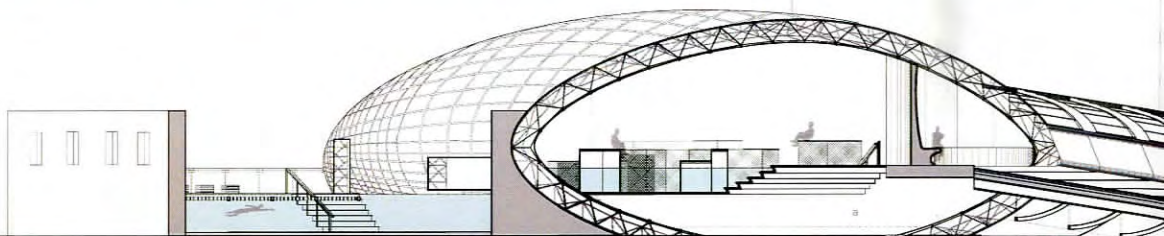






SITE MODEL





a Thermal Pools

Structure from roof water - will support. Pools to clear water with rays and allow for the outdoor view from swimming pool

b Peloids

Building - three oval pools with the size of 100 degrees. They are found in 30 degrees of temperature cooling to 20 degrees and 20 degrees. The pools are 100 degrees of temperature cooling to 20 degrees and 20 degrees. The pools are 100 degrees of temperature cooling to 20 degrees and 20 degrees.

c Bicarbonate: sodium bicarbonate and calcium bicarbonate

Building - 100 degrees of temperature cooling to 20 degrees and 20 degrees.

d Chloride

Building - 100 degrees of temperature cooling to 20 degrees and 20 degrees.

e Gases: carbon dioxide radon

Building - 100 degrees of temperature cooling to 20 degrees and 20 degrees.

f Sulfur and Sulfates

Building - 100 degrees of temperature cooling to 20 degrees and 20 degrees.

g Laundry Room and Mineral Storage

b

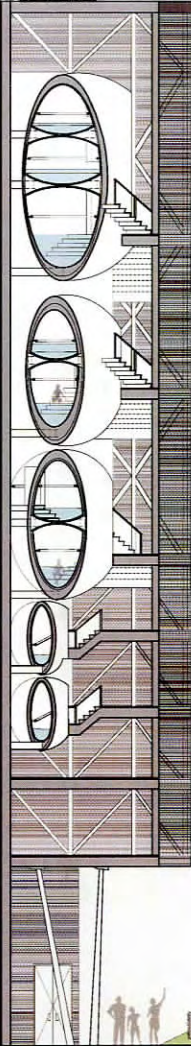
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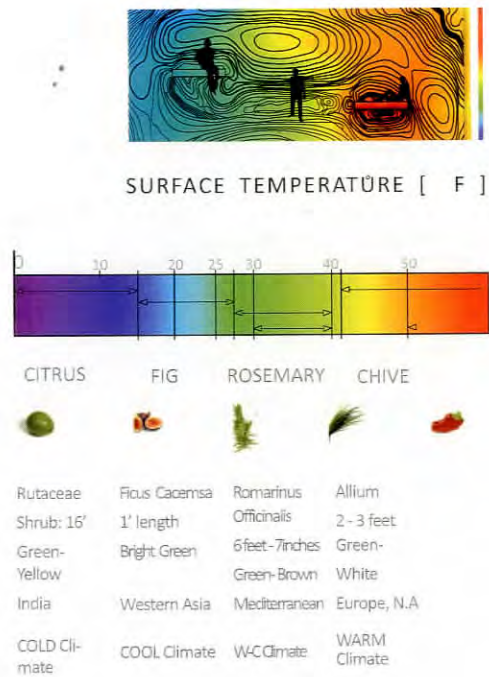
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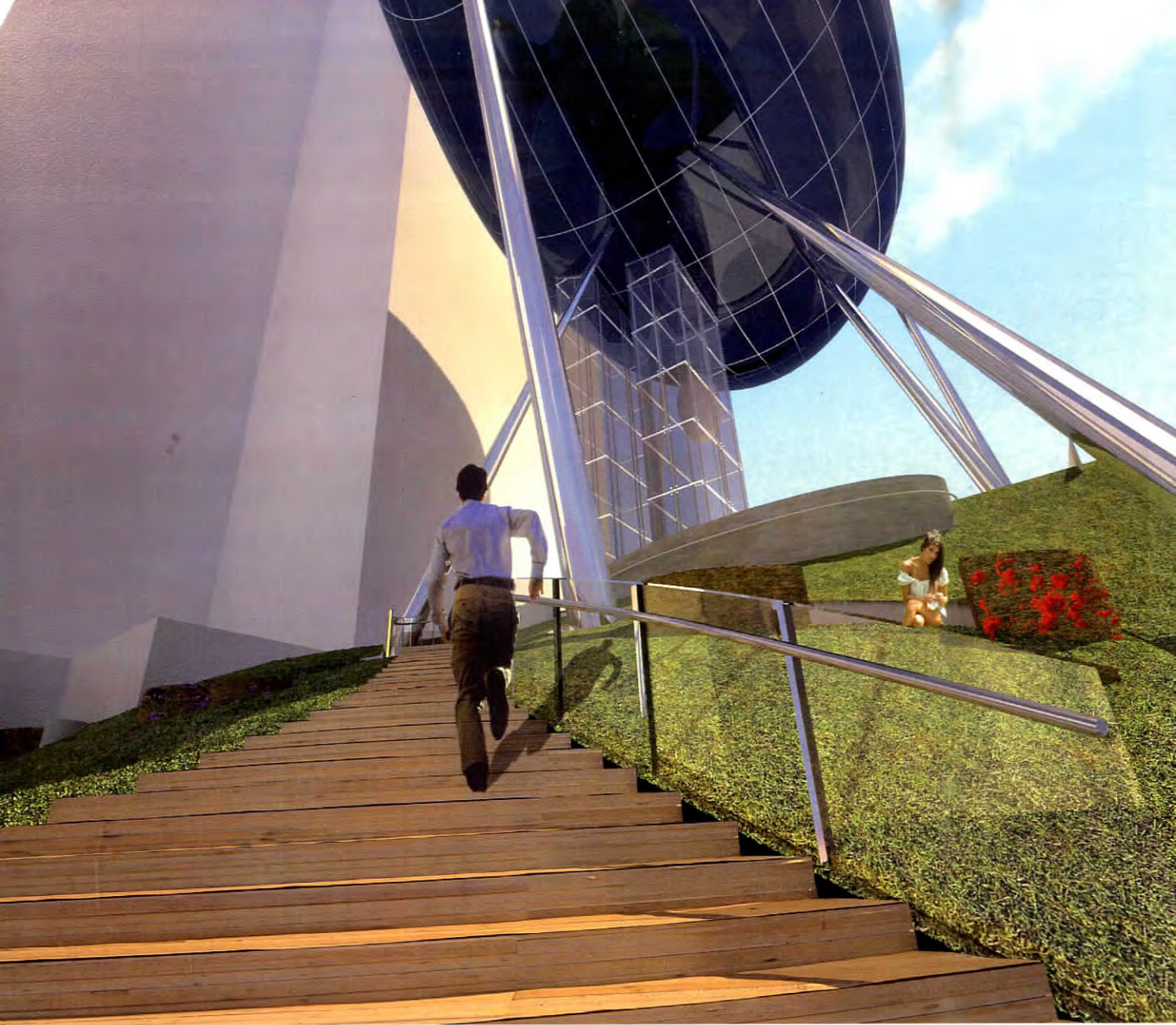
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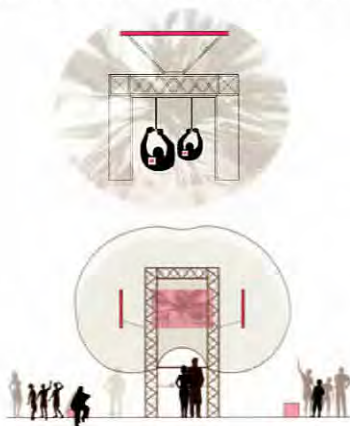




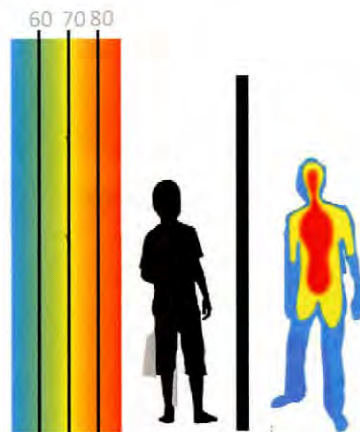




Depending on a persons heart beat through the transfer of sensors on the cardio equipment, a pattern of varying intensities will be displayed amongst screens in the fitness center. If one if running and burning more calories then the person next to them, there pattern will be more intense then their neighbor.



Internal temperature will be registered through walls and mirrors, instead of seeing your reflection when lifting free weights, you can now see which muscle is being stretched and working the hardest .





The visual projection of the senses become localized within the building. The Fitness center and Mineral Spa must deal with heating and cooling, there can be no stagnant air. Since the air is polluted in New York City, a natural convection current would not be so successful. Using the natural chemical process of breathing and photosynthesis will help create a healthy breathing system through a vegetated wall. Oxygen will be absorbed by the players who then release carbon dioxide and water vapor that transforms chemical energy into simple substances. Plants absorb the carbon dioxide and minerals that occur through respiration and perspiration. Excess heat will be removed through evaporation and transpiration (a person loses up to .8 gallons of water per hour during physical exercise).





A one-hundred percent transparent floor lifted up one hundred forty feet off the ground can only lead to one feeling uneasy or even nauseous. This transfer takes gym members from the mineral spa to the fitness center or vice versa which extracts the feeling of vertigo amongst its walkers.

